

## FINAL REPORT

# Corridor Evaluation CANAMEX Designation Between I-10 and US 93 (Wickenburg Road - Vulture Mine Road)

ADOT Contract # TO149H001  
ADOT Purchase Order # PG-KG2381

October 2004

Prepared for



Arizona Department of Transportation  
Transportation Planning Division  
206 S. 17<sup>th</sup> Avenue, MD 310B  
Phoenix, Arizona 85007



**FINAL REPORT**

**Corridor Evaluation**

for

**CANAMEX Designation**  
**Between I-10 and US 93**  
**(Wickenburg Road – Vulture Mine Road)**

ADOT Contract # TO149H001  
ADOT Purchase Order # PG-KG2381

October 2004

Prepared for:



**Arizona Department of Transportation**

Transportation Planning Division  
206 S. 17<sup>th</sup> Avenue, MD 310B  
Phoenix, Arizona 85007

Prepared by:



**Kimley-Horn  
and Associates, Inc.**

1860 East River Road, Suite 100  
Tucson, Arizona 85718  
(520) 615-9191



## TABLE OF CONTENTS

<b>I. INTRODUCTION .....</b>	<b>1</b>
STUDY APPROACH .....	1
STUDY AREA .....	2
TECHNICAL ADVISORY COMMITTEE .....	2
<b>II. EXISTING CONDITIONS .....</b>	<b>4</b>
TRAFFIC DATA .....	4
LAND OWNERSHIP .....	4
PHOTOGRAMMETRY AND MAPPING .....	4
<b>III. ROADWAY FEASIBILITY .....</b>	<b>6</b>
DESIGN CRITERIA .....	6
ACCESS CONTROL .....	6
HORIZONTAL ALIGNMENT .....	6
VERTICAL ALIGNMENT .....	7
PROJECT TERMINI .....	8
PAVEMENT DESIGN ASSUMPTIONS .....	8
DRAINAGE ASSUMPTIONS .....	8
COST ASSUMPTIONS .....	8
<b>IV. ENVIRONMENTAL FEASIBILITY .....</b>	<b>10</b>
SECTION 404/401 OF THE CLEAN WATER ACT .....	10
PROTECTED SPECIES AND HABITAT .....	10
NATIONAL HISTORIC PRESERVATION ACT .....	12
PRIME FARMLAND SOILS .....	12
NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) .....	12
CONTAMINATION DATABASE REVIEW .....	12
<b>V. PUBLIC PARTICIPATION .....</b>	<b>14</b>
<b>VI. SUMMARY OF FINDINGS AND RECOMMENDATIONS .....</b>	<b>15</b>
<b>VII. APPENDIX .....</b>	<b>17</b>



## LIST OF EXHIBITS

---

EXHIBIT 1 – VICINITY MAP.....	3
EXHIBIT 2 – EXISTING AND FUTURE TRAFFIC VOLUMES.....	4
EXHIBIT 3 – LAND OWNERSHIP.....	5
EXHIBIT 4 – PRELIMINARY PLANNING-LEVEL ESTIMATE OF COSTS.....	9
EXHIBIT 5 - THREATENED AND ENDANGERED SPECIES THAT MAY OCCUR IN MARICOPA COUNTY.....	11

## LIST OF APPENDICES

---

APPENDIX A – Feasibility Plans	
APPENDIX B – AZ Game and Fish Department Response	
APPENDIX C – State Historic Preservation Office Standardized Report Abstract	
APPENDIX D – May Public Meeting Comment Summary	
APPENDIX E – July Public Meeting Comment Summary	





## I. INTRODUCTION

---

In the late 1990s, the Arizona Department of Transportation (ADOT) and the Maricopa Association of Governments (MAG) cooperated in the identification of 15 alternative routes for the CANAMEX Trade Corridor connecting the I-10/I-8 interchange near Casa Grande with US 93 west of Wickenburg. ADOT and MAG next developed a short-list of eight route alternatives and developed ten evaluation criteria for use in selecting and designating a preferred CANAMEX Trade Corridor between Casa Grande and Wickenburg. ADOT then directed Kimley-Horn and Associates to compile evaluation data on each route alternative. The ADOT report, *Compilation of Evaluation Data for the Designation of CANAMEX through the Maricopa Region* (dated August 2000), and input received from a public outreach effort provided a foundation for differing conclusions by MAG and ADOT on a preferred CANAMEX route alternative. MAG formally designated a CANAMEX alignment alternative which begins at the I-8/I-10 interchange and includes I-8 west to SR 85, SR 85 north to I-10, I-10 west to the Wickenburg Road alignment (extended to I-10), Wickenburg Road north to Vulture Mine Road, and Vulture Mine Road north to US 93 via the future Wickenburg Bypass. ADOT deferred a decision on a CANAMEX connection between I-10 and US 93 until the completion of the *Corridor Evaluation for CANAMEX Designation Between I-10 and US 93 (Wickenburg Road – Vulture Mine Road)*.

The principal purpose of the *Corridor Evaluation for CANAMEX Designation between I-10 and US 93* was to conduct a transportation planning study to evaluate the feasibility of upgrading the Wickenburg Road/Vulture Mine Road corridor to standards consistent with other non-interstate segments of the CANAMEX Trade Corridor connecting I-10 and the future Wickenburg Bypass that connects with US 93 west of Wickenburg. Corridor improvement and constructibility issues, environmental issues, and planning-level construction cost estimates resulting from this study will serve as a foundation for decisions on CANAMEX Trade Corridor designation and the need for additional studies and design in accordance with the *ADOT Project Development Process Manual*.

### **Study Approach**

This feasibility study consisted of several key components including data collection, the development of roadway design criteria and typical sections, corridor evaluation, and public involvement meetings.

### **Data Collection**

Available data and information that were considered in the study included aerial photogrammetry, topographic and survey data, GIS files, as-built plans, right-of-way information, traffic volume data, and other relevant reports. USGS aerial photographs and National Elevation Data survey grid points were obtained and were supplemented with aerial photographs provided by Maricopa County Department of Transportation (MCDOT). The relevant reports included the *Compilation of Evaluation Data for Designation of the CANAMEX Corridor Through the Maricopa Region*, the *Southwest Area Transportation Study*, the *Northwest Area Transportation Study*, the *Maricopa Association of Governments Regional Transportation Plan*, and the *Initial Feasibility Report for the US 93 Wickenburg Ultimate Bypass Project*.



### Roadway Design Criteria and Typical Sections

A meeting was held with representatives from ADOT's Transportation Planning Division, Pre-Design, and Roadway Design groups. Projected traffic volumes on Wickenburg Road and Vulture Mine Road, CANAMEX Corridor design guidelines and ADOT roadway design guidelines were discussed. A minimum design speed of 70 mph and a desirable design speed of 75 mph and the use of an ADOT Type "RA" cross section (four lane rural divided highway) was adopted for use in this study.

### Corridor Evaluation

Using the data collected and design criteria, a corridor feasibility evaluation was conducted. This evaluation included a field review and evaluation of the horizontal and vertical geometry along the corridor. A review for environmental issues including Section 404/401 of the Clean Water Act, Endangered Species Act, National Historic Preservation Act, Prime Farmlands Soils, National Environmental Policy Act and Contamination were performed.

### Public Involvement Meetings

Two rounds of public involvement meetings were held to solicit input on the project. Each round of public meetings was conducted at Wickenburg High School and Ruth Fisher Elementary School. Meetings were held in March 2004 and July 2004.

### Study Area

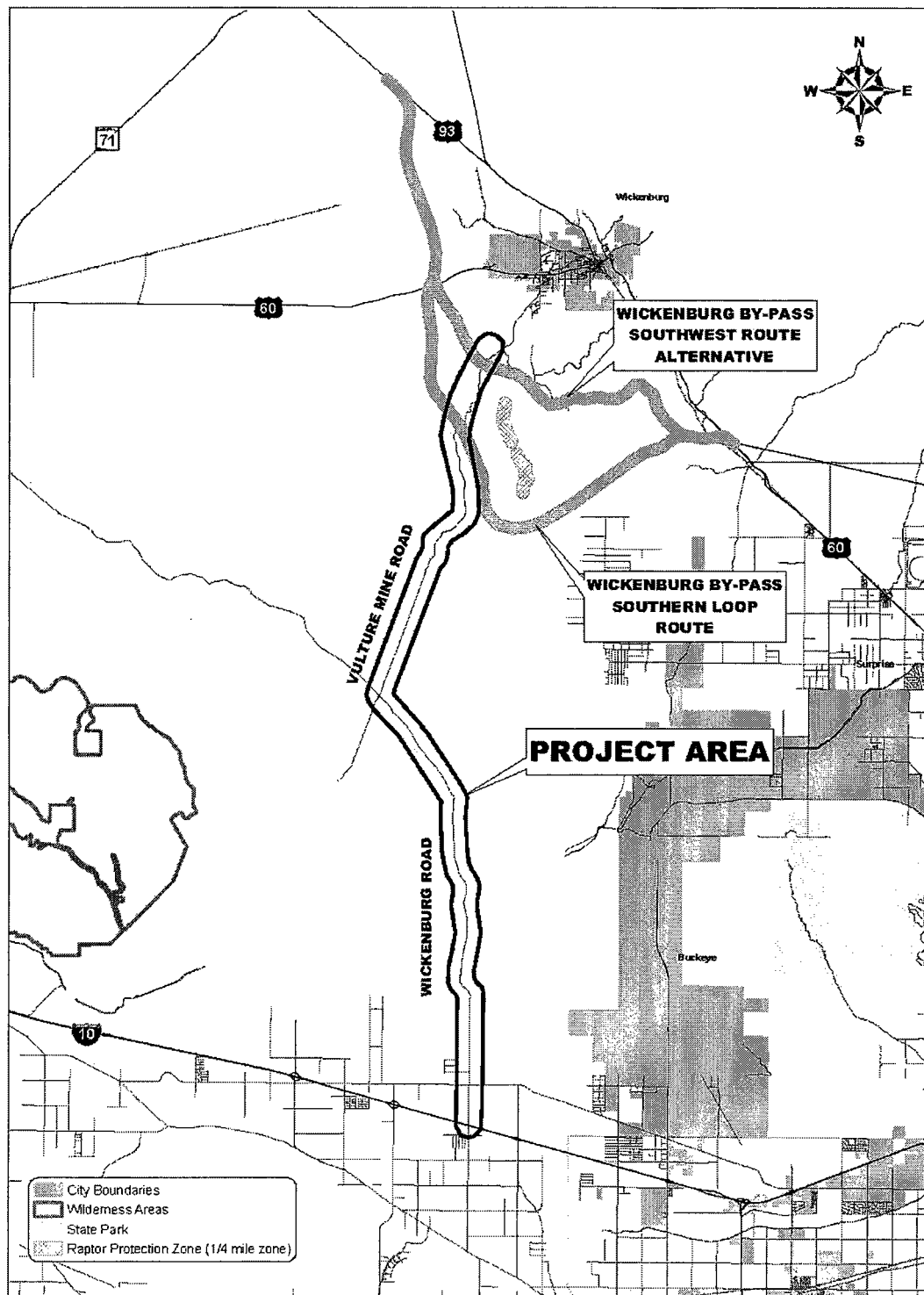
This study extends from I-10 to the proposed Ultimate Wickenburg Bypass generally within 500 feet of the existing centerlines of 355<sup>th</sup> Avenue, Wickenburg Road, and Vulture Mine Road. A vicinity map is shown in **Exhibit 1**.

### Technical Advisory Committee

A Technical Advisory Committee (TAC) was formed with members representing ADOT Transportation Planning, ADOT Pre-Design, ADOT Roadway Design, ADOT Environmental and Enhancement Group, ADOT Phoenix Construction and Maintenance Groups, the Maricopa Association of Governments, the Maricopa County Department of Transportation, the Federal Highway Administration, the City of Buckeye, and the City of Wickenburg. The TAC provided input into the work plan and schedule, data availability, the design criteria, corridor evaluation approach and the public involvement meetings. TAC meetings were held in January, May, and September of 2004.



## EXHIBIT 1 – VICINITY MAP





## II. EXISTING CONDITIONS

All existing roadways along the corridor are two-lane paved roadways. The existing roadway has numerous at-grade wash crossings, low speed horizontal curves, and at-grade intersections including the intersection of Wickenburg Road and Vulture Mine Road. The existing speed limits vary from 35 to 55 mph throughout the project with advisory speeds as low as 25 mph in several areas.

### ***Traffic Data***

Available traffic volumes on Wickenburg Road and Vulture Mine Road were collected in 2000. Available traffic projections reflect 2020 traffic volumes prepared by MAG. Future traffic projections are several years old and may not reflect the impact of developments such as Douglas Ranch. A summary of available existing and future traffic volumes are provided in **Exhibit 2**.

**EXHIBIT 2 – EXISTING AND FUTURE TRAFFIC VOLUMES**

Road Name	Beginning Point	Ending Point	2000 Existing Daily Traffic	2020 Future Daily Traffic
355th Avenue/Wickenburg Road	I-10	Vulture Mine Road	386	4000
Vulture Mine Road	Wickenburg Road	Future Wickenburg Bypass	769	4000

### ***Land Ownership***

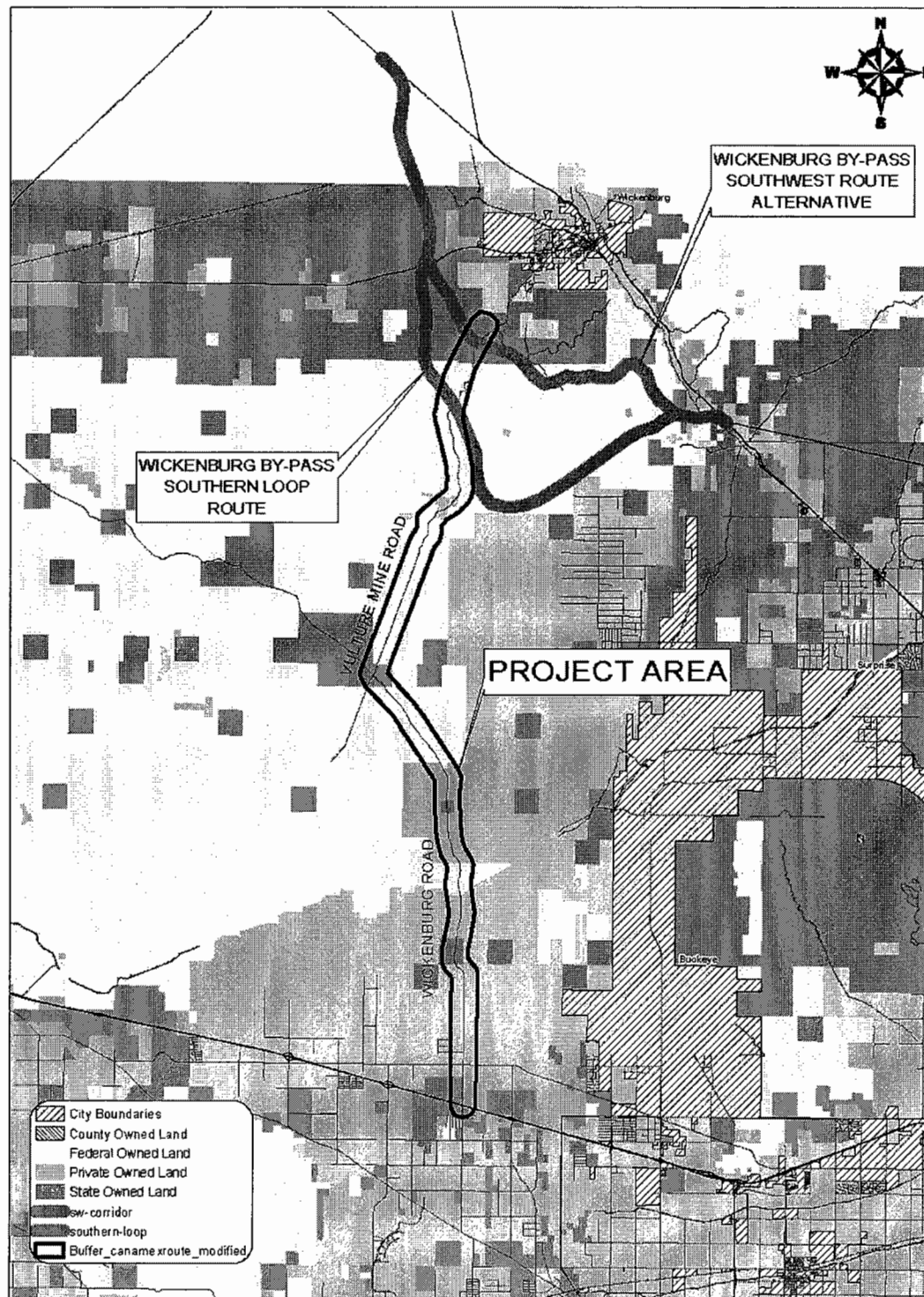
The majority of the land along this corridor is owned by governmental agencies, both state and federal. Along the southern portion of the project in the vicinity of 355th Avenue, the land use is low density residential. North of the Central Arizona Project (CAP) canal, the Douglas Ranch Master Planned Community is under development. A map showing land ownership is shown in **Exhibit 3**.

### ***Photogrammetry and Mapping***

Ortho-rectified aerial photographs and data points were obtained from the United States Geological Survey (USGS). Elevation data are set on a one hundred foot grid with no break lines. These data were used to create an existing surface model for use in determining conceptual horizontal and vertical roadway alignments. Typically, a surface model of this type provides a level of accuracy of plus or minus five feet. The USGS mapping and elevation data were considered to be satisfactory for a planning level analysis of this type.



### EXHIBIT 3 – LAND OWNERSHIP





### III. ROADWAY FEASIBILITY

---

A major component of the study was to determine the feasibility of a roadway alignment that is consistent with ADOT and CANAMEX design criteria. Roadway design criteria, access control, horizontal and vertical geometry, project termini, pavement design, drainage, and cost assumptions are discussed in this section.

#### **Design Criteria**

ADOT Roadway Design staff was coordinated with to establish roadway design criteria and cross-sections. A minimum design speed criterion was set at 70 mph with 75 mph being preferred. The ultimate roadway is to be a four lane divided roadway possibly with an interim two-lane section. An ADOT Type “RA” cross section is recommended for this project. A typical cross section is provided in the Feasibility Plans in **Appendix A**. These Feasibility Plans also contain an example of a possible general intersection treatment, a possible treatment for the intersection of Vulture Mine Road and Wickenburg Road, and conceptual right-of-way limits for a future alignment. These possible intersection treatments are interim as the long-range plan is for a fully access controlled facility.

#### **Access Control**

Design criteria include preservation of full access control along the CANAMEX Trade Corridor. Interim access may be permitted at major intersections and other points of access that do not adversely affect traffic operation and safety. New private driveways and minor intersections should be prohibited and existing private driveways should be eliminated as opportunities occur.

#### **Horizontal Alignment**

There are several issues involving the horizontal alignment. They are:

- **Constructability** – ADOT has directed that the possibility of building an interim two lane roadway until traffic demands require the four lane section be analyzed. The simplest solution will be to build one half of the proposed roadway next to the existing roadway (in this case, the northbound lanes). This allows ADOT to maintain traffic on the existing roadway with minimal impacts. Upon completion of the northbound lanes, traffic can be moved to the new roadway and the existing road can be demolished. ADOT can then immediately choose to begin construction of the southbound lanes or defer construction until the additional lanes are needed. If the interim roadway section is to be operated for an extended period prior to construction, it will be necessary to address left turns and potential passing lanes.
- **Widen to the East of the Existing Roadway** – There are three basic alternatives for widening a roadway. The roadway can be widened symmetrically about the centerline of the existing roadway, or it can be widened to the left or right of the existing alignment. In evaluating the proposed alignment for the CANAMEX Trade Corridor, the following factors were taken into consideration: 1) near the south terminus of the project, there are several residential properties. The properties on the west side of 355th Avenue tend to be closer to the existing roadway than those on the east side of the roadway. 2) Near the north terminus of the project, the Vulture Mine is relatively close to the existing roadway. Considering



- these factors and a desire to minimize the impact on adjacent properties whenever possible, an alignment was considered to the east of the existing roadway.
- **75 mph Design Speed** – Along the northern section of Vulture Mine Road, there are several horizontal curves and switchbacks as the terrain becomes more mountainous. In order to maintain the 75 mph design speed, it is necessary to consolidate multiple curves into a single curve.
  - **Maintain Proposed Roadway within 500 Feet of Existing Centerline** – A condition was established at the onset of the study that the new roadway remain within 500 feet of the existing roadway centerline wherever possible. This condition is intended to keep the new alignments along the existing 355th Avenue/Wickenburg Road/Vulture Mine Road corridor rather than defining an alignment in a new location. There are two locations in the alignment where the future roadway may extend beyond 500 feet. They are:
    - The intersection of Wickenburg Road and Vulture Mine Road – The existing intersection has four legs (the south leg of Vulture Mine Road is unpaved) with the alignment turning ninety degrees from Wickenburg Road to Vulture Mine Road. In order to maintain continuity and the 75 mph design speed along the CANAMEX Corridor, it will be necessary to realign the intersection. A possible treatment of this intersection is provided in the conceptual plans in Appendix A.
    - Along Vulture Mine Road in the vicinity of the Vulture Mine, there are several curves and switchbacks. In order to maintain the 75 mph proposed design speed and minimize the impacts on the Vulture Mine, several horizontal curves were consolidated. The straightening of the roadway in this segment resulted in a segment of the roadway extending beyond the 500 foot envelope.

### **Vertical Alignment**

There are several issues involving the vertical alignment. They are:

- **Accuracy of the Surface Model** – Due to the level of accuracy available with the base mapping used in this project, the vertical design should be considered very preliminary. Break lines were not available as part of the data package and this surface model should be considered accurate to plus or minus 5 feet.
- **Lengths of Vertical Curves** – Design criteria requires a minimum vertical curve length of 800 feet for rural roadways and 1000 feet is required for controlled access roadways. Since the CANAMEX Corridor is recommended to be fully access controlled, the profiles prepared for this project used a minimum vertical curve length of 1000 feet.
- **Minimum Slopes** – In order to maintain drainage along a roadway a minimum slope of 0.5 percent should be used.
- **Vertical Curve Consolidation** – In several cases, multiple existing vertical curves had to be consolidated into a single vertical curve in order to meet the minimum slope and curve length requirements.
- **Match Existing Profile** – Normally, it is desirable to match the existing profile as closely as possible. This is done to minimize cut and fill and right-of-way impacts. In many areas of this project, the existing roadway slope appears to be less than 0.5 percent. In order to provide an all-weather roadway with proper drainage, there are several areas where it is not possible to match the existing grade.
- **Earthwork** – It will not be possible to match the existing profile in many locations. In order to meet the design criteria, the analysis indicated that borrow will be required for this project.





As the project advances and better surface modeling data become available, it may be possible to balance the cut and fill requirements of this project.

### ***Project Termini***

At the southern terminus of this project a new traffic interchange with I-10 will need to be constructed. Additional studies will be required to determine the design and traffic control at this interchange.

At the north terminus of the project, it was assumed that the roadway will intersect with the future Wickenburg Bypass intersecting with US 93 west of Wickenburg. Assuming that the terminus will be the Ultimate Wickenburg Bypass, the following issues were identified.

- **An At-Grade Intersection Be Constructed** – In the long-range plan, US 93 will be a fully access controlled facility. However, based on the projected traffic volumes for the CANAMEX Trade Corridor and the Wickenburg Bypass, an at-grade intersection may be appropriate for projected traffic volumes in 2020. Since both of these routes will be major roadways, a traffic signal may be required. As the two project advance, a traffic signal warrant analysis should be conducted to evaluate this potential need. The installation of an at-grade signalized intersection will be an interim treatment. A traffic interchange will be required when full access on US 93 is enacted.
- **Wickenburg Bypass Route Continuity** – The Wickenburg Bypass has a 2020 projected traffic volume of 15,000 to 20,000 vehicles per day as compared to a CANAMEX 2020 projected volume of 4,000 vehicles per day. Based on these projected traffic volumes, route continuity should be provided for the Wickenburg Bypass and the CANAMEX Corridor should intersect with the Bypass.

### ***Pavement Design Assumptions***

Considering the potential heavy truck traffic associated with this project, a freeway type pavement section was assumed for preparation of the estimate of cost. The assumed section used was 9 inches of asphaltic concrete pavement over 9 inches of Aggregate Base material. Future studies and evaluation of design concepts will be necessary to determine a final pavement design.

### ***Drainage Assumptions***

The drainage features for this study are based on a visual analysis of aerial photographs and the size of the channel. If the channel appeared to be wider than 75 feet, it was assumed that a bridge would be required. If the channel was less than 75 feet in width, it was assumed that a Reinforced Concrete Box Culvert (RCBC) could be used. Based on this level of analysis, the project will likely require 8 bridges including one over the CAP canal and 23 RCBC structures.

### ***Cost Assumptions***

Based on the assumed pavement structure, one mile of the ultimate four lane roadway (including pavement, aggregate base, excavation and intersections including the interim intersection between the CANAMEX Corridor and the Ultimate Wickenburg Bypass) was assumed to cost \$3 million. Bridges were assumed to cost \$1 million each and RCBC structures \$100,000 each. The new traffic interchange at 355th Avenue and I-10 was estimated to cost of \$20 million including the new bridges ramps, drainage, and traffic control. A preliminary planning-level opinion of costs can be found in **Exhibit 4**.



**EXHIBIT 4 – PRELIMINARY PLANNING-LEVEL ESTIMATE OF COSTS**

Item	Quantity	Unit	Unit Cost	Total
1 Mile of Roadway	30	Ea	\$3,000,000	\$90,000,000
Interchange @ I-10/355th	1	Ea	\$20,000,000	\$20,000,000
Bridges	8	Ea	\$1,000,000	\$8,000,000
Box Culverts	23	Ea	\$100,000	\$2,300,000
			<b>Construction Costs</b>	\$120,300,000
Design		10%		\$11,400,000
Construction Administration		15%		\$17,000,000
			<b>Subtotal</b>	\$148,700,000
Contingency		25%		\$37,175,000
			<b>Total</b>	<b>\$185,875,000</b>



## IV. ENVIRONMENTAL FEASIBILITY

---

Research on available information and databases was conducted to identify environmental issues and fatal flaws associated with the development of the corridor. The evaluation was limited to review of the *Compilation of Evaluation Data for Designation of the CANAMEX Corridor through the Maricopa Region* (August 2000), aerial photograph and map review, database review, and agency coordination. The evaluation did not include a field review.

### **Section 404/401 of the Clean Water Act**

USGS 7.5 minute quadrangles were reviewed to determine if potential waters of the US were mapped within the study area. The following quadrangles were reviewed:

- Vulture Peak, Arizona (Provisional Edition 1990)
- Vulture Mine, Arizona (Provisional Edition 1990)
- Star Well, Arizona (Provisional Edition 1989)
- Flatiron Mountain, Arizona (Provisional Edition 1990)
- Wintersburg, Arizona (Provisional Edition 1984)

Areas mapped as “blue lines” on USGS 7.5 minute quadrangles represent channels that are often considered waters of the US. Coyote Wash, Jackrabbit Wash, Jimmie Wash, Mill Wash, and Syndicate Wash, as well as numerous unnamed washes, were identified as likely waters of the US. Other washes visible on aerial maps are also likely waters of the US.

Based on aerial photography review, the washes within the study area vary greatly in size. The majority of the wash crossings are likely to result in impacts that do not exceed 0.5 acre; therefore be eligible for authorization under Nationwide Permit (NWP) Number 14. A portion of these crossings are expected to exceed 0.1 acre of impact; therefore will require pre-construction notification to the US Army Corps of Engineers (Corps). Crossings of large washes may result in impacts greater than 0.5 acre. If impacts at any crossing exceed 0.5 acre, a Section 404 individual permit will be required. The individual permit process requires a more detailed permit application and the Corps review period is typically lengthier than that for a NWP.

If the project qualifies for NWP Number 14, it will be eligible for Section 401 conditional certification. Projects that are eligible for conditional certification do not require that a request for certification be submitted to the Arizona Department of Environmental Quality (ADEQ). Projects that require a Section 404 individual permit also require a separate request to ADEQ for Section 401 Water Quality Certification.

### **Protected Species and Habitat**

The list of threatened and endangered species that may occur in Maricopa County was reviewed to determine if federally designated critical habitat for any of the listed species occurs within the study area. The list of species and critical habitat evaluation is included in **Exhibit 5**.



**EXHIBIT 5 - THREATENED AND ENDANGERED SPECIES THAT MAY OCCUR IN MARICOPA COUNTY**

Common Name	Scientific Name	Status	Critical Habitat within Study Area?
Arizona agave	<i>Agave arizonica</i>	Endangered	No
Arizona cliffrose	<i>Purshia subintegra</i>	Endangered	No
Bald eagle	<i>Haliaeetus leucocephalus</i>	Threatened	No
Cactus ferruginous pygmy-owl	<i>Glaucidium brasilianum cactorum</i>	Endangered	No
California Brown pelican	<i>Pelecanus occidentalis californicus</i>	Endangered	No
Desert pupfish	<i>Cyprinodon macularis</i>	Endangered	No
Gila topminnow	<i>Poeciliopsis occidentalis occidentalis</i>	Endangered	No
Lesser long-nosed bat	<i>Leptonycteris curasoae yerbabuenae</i>	Endangered	No
Mexican spotted owl	<i>Strix occidentalis lucida</i>	Threatened	No
Razorback sucker	<i>Xyrauchen texanus</i>	Endangered	No
Sonoran pronghorn	<i>Antilocapra americana sonoriensis</i>	Endangered	No
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	Endangered	No
Yuma clapper rail	<i>Rallus longirostris yumanensis</i>	Endangered	No
Gila Chub	<i>Gila intermedia</i>	Proposed Endangered	No
Yellow-billed cuckoo	<i>Coccyzus americanus</i>	Candidate	No

Source: US Fish and Wildlife Service, 2004

A request was submitted to the Arizona Game and Fish Department (AGFD) for a Heritage Data Management System list of sensitive species occurrence that has been documented within the study area, including a three-mile buffer. The only species included in the database is the Sonoran Desert Tortoise (*Gopherus agassizii*), Sonoran population. The tortoise is listed as a Species of Concern by the US Fish and Wildlife Service and as Wildlife of Special Concern in Arizona by the AGFD. The database search determined that the study area is not within the vicinity of any proposed or designated critical habitat. The AGFD also requested an opportunity to provide an evaluation of impacts to wildlife or wildlife habitats associated with activities within the study area once specific details become available. (Arizona Game and Fish Department, April, 2004).

In addition, AGFD Region IV provided preliminary comments on potential impacts to wildlife associated with the CANAMEX Corridor. The AGFD letter indicates that the road crosses important wildlife habitat and will be a significant barrier to wildlife movement; therefore the road



improvements would have significant adverse impacts to wildlife (Arizona Game and Fish Department, August 2004). The AGFD response letters are included in **Appendix B**.

The study area is also near a protected area that surrounds the cliffs of Vulture Peak and Caballeros Peaks. This area was established by the Bureau of Land Management (BLM) Lower Gila North Management Framework Plan as a Raptor Protection Area (Sverdrup Civil, Inc., 2001).

### ***National Historic Preservation Act***

Archaeological Consulting Services (ACS) archaeologists conducted a literature review of the AZSite Cultural Resources Database and the ADOT Historic Preservation Team's Portal was conducted to gather cultural resources information about the study area. The AzMILS geographic index published by the Arizona Department of Mines and Mineral Resources was also reviewed for relevant data on mines in the area.

The literature review and culture-historical overview reports a potentially complex interrelationship between current Native American concerns regarding the area. Large portions of the study area have not been examined for cultural resources. The complete ACS report and State Historic Preservation Office (SHPO) Standardized Report Abstract are included in **Appendix C**.

### ***Prime Farmland Soils***

Soil surveys and listings of prime farmland soils were reviewed to determine the potential for prime farmland within the study area. Soils within portions of the study area are mapped as soils that are included in the list of prime farmland (USDA 1977, USDA 1986, USDA 2001a, and USDA 2001b). These soils are only considered prime farmland if they are irrigated.

### ***National Environmental Policy Act (NEPA)***

The ADOT Environmental & Enhancement Group was contacted to determine what level of environmental documentation would likely be required for improvements related to CANAMEX designation of the study area. It is anticipated that, at a minimum, an environmental assessment (EA) will be required. As the project progresses, involvement from the Federal Highway Administration (FHWA) to determine the appropriate level of NEPA documentation will be required.

### ***Contamination Database Review***

Contamination databases available on the Arizona Department of Environmental Quality (ADEQ) website were reviewed. The following databases were reviewed:

- ADEQ Leaking Underground Storage Tank (LUST) Database (ADEQ 2004a)
- Arizona Superfund Program List, including Water Quality Assurance Revolving Fund (WQARF) and potential WQARF, National Priority List (NPL), and Department of Defense (DoD) sites (ADEQ 2004b)

In addition to online databases, ADEQ's list of Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDFs) were reviewed. A printed copy of this information was requested from ADEQ (ADEQ 2004c).

One LUST listing was identified that is potentially within the study area. This LUST listing is the Tonopah Area Wide Study (Facility ID: 0-008572, Leak ID: 3933.01). The ADEQ database reported



the facility address for this listing as “Tonopah Area Wide.” ADEQ was contacted to request additional address information for this listing. ADEQ indicated that this listing is for groundwater contamination without a known point source. Based on preliminary research, it cannot be determined if this listing affects the study area.

No Superfund sites or TSDFs were identified during the database search. Contamination related to mining in the vicinity of the study area was not investigated.



## V. PUBLIC PARTICIPATION

---

Two rounds of public meetings, consisting of two meetings each, were held in March and July 2004. Area residents, property owners, and business representatives were notified of the meetings through a media release issued to local media outlets by ADOT. The media releases encouraged attendance to help identify concerns and issues with Wickenburg Road and Vulture Mine Road that should be considered as part of the study. Summaries of the comments received can be found in **Appendix D**.

### **March 2004 Public Meetings**

A public meeting was held in Wickenburg on March 10, 2004 from 5 P.M. to 7 P.M. at the Wickenburg High School located at 1090 South Vulture Mine Road. This meeting was attended by approximately 122 people. A second meeting was held in Tonopah on March 11, 2004 from 5 p.m. to 7 p.m. at Ruth Fisher Elementary School located at 38201 West Indian School Road. This meeting was attended by approximately 45 people. A project summary sheet and map were distributed at each open house and public information was obtained using a comment form. Completed comment forms were received at the meetings, via mail, or email for a comment period which ended on April 2, 2004.

Those attending the first set of public meetings, particularly those in Wickenburg were under the impression that the CANAMEX Trade Corridor would pass through Wickenburg and were significantly opposed to it. This first Open House was spent trying to explain that there are no plans for the CANAMEX Trade Corridor to pass through Wickenburg. There was mixed support for the Wickenburg Ultimate Bypass Project. Concern was also expressed about what would happen if the Ultimate Bypass were not built.

### **July 2004 Open Houses**

A public meeting was held in Wickenburg on July 14, 2004 from 5 P.M. to 7 P.M. at Wickenburg High School located at 1090 S. Vulture Mine Road. This open house was attended by approximately 32 people. A second meeting was held in Tonopah on July 15, 2004 from 5 p.m. to 7 p.m. at Ruth Fisher Elementary School located at 38201 W. Indian School Road. This meeting was attended by approximately 25 people. A project summary sheet and map were distributed at each meeting and public information was obtained using a comment form. Completed comment forms were received at the meetings, via mail or email for a comment period which ended on August 14, 2004.

While it appears that the attendees at the July open house were still not in support of the project, they did seem to understand that the CANAMEX routing would intersect with the Ultimate Wickenburg Bypass and connect to US 93 west of Wickenburg.





## VI. SUMMARY OF FINDINGS AND RECOMMENDATIONS

---

### Findings:

- **Horizontal Alignment** – There do not appear to be any factors in the horizontal alignment that can not be resolved reasonably.
- **Vertical Alignment** – While a more in depth analysis is necessary as the project progresses, there do not appear to be any issues in the vertical alignment that can not be resolved reasonably.
- **Intersection Realignment** - The intersection of Vulture Mine Road and Wickenburg Road will require major intersection modifications to allow for a continuous flow movement along the CANAMEX corridor.
- **Drainage** – While several bridges and other drainage structures will be required, it appears to be possible to mitigate drainage issues.
- **Section 404/401 of the Clean Water Act** – While Section 404 permitting will be necessary, there do not appear to be any fatal flaws associated with this issue.
- **Protected Species and Habitat** - Further biological studies will be required, but endangered or protected species do not appear to create any significant issues or fatal flaws for this project.
- **National Historic Preservation Act** – There is a potential for issues with archeological sites since large portions of the study area have not been examined for cultural resources. Additional research, field survey and coordination will be required as the project progresses; however, there do not appear to be any fatal flaws associated with this issue.
- **Prime Farmland Soils** – There do not appear to be any fatal flaws associated with this issue.
- **National Environmental Policy Act** – It is anticipated that, at a minimum, an environmental assessment document will be required for this project.
- **Contamination Database Review** – One Leaking Underground Storage Tank listing is potentially within the project area. The listing is for groundwater contamination without a known point source. Further investigation into this issue will be required as the project progresses. Research into mining contamination was not conducted as a part of this feasibility study. Additional research should be conducted as this project progresses. Where there is a potential for contaminants within the project area, there do not appear to be any issues related to contamination that can not be resolved.
- **Public Participation** - During the March open house in Wickenburg, many of the community members attending were irate because they understood that the project would come through the heart of Wickenburg. While it appeared that the attendees at the July open house were still not in support of the project, they did seem to understand that the route would connect to US 93 via the Ultimate Wickenburg Bypass.

### Recommendations:

- Given the scope of this study, the upgrade of 355<sup>th</sup> Avenue, Wickenburg Road, and Vulture Mine Road to CANAMEX standards is generally feasible.



- If decisions are made to designate this corridor as a segment of the CANAMEX Trade Corridor, 355<sup>th</sup> Avenue, Wickenburg Road, and Vulture Mine Road, from I-10 to the Ultimate Wickenburg Bypass should be designated as a State Highway.
- Further engineering and environmental studies will be required to establish roadway alignments, obtain environmental clearances, estimate construction and right-of-way costs, and identify implementation issues and strategies.
- Future environmental studies should consider the following:
  - A Section 404 jurisdictional delineation (JD) of the study area be performed and submitted to the Corps for concurrence. Following Corps concurrence and project design, it can be determined if the proposed project will be eligible for authorization under NWP Number 14 and if pre-construction notification will be required.
  - A field review should be conducted to determine if suitable habitat for listed species occurs within the study area. Following the biological field review, recommendations should be made regarding the need for species specific surveys.
  - Consultation with the Bureau of Land Management to determine the proximity of the proposed improvements to the Raptor Protection Area and other sensitive species concerns should occur.
  - Additional research, field survey, and coordination of cultural resources continue during future project phases.
  - That field reconnaissance be conducted to determine if the areas mapped as prime farmland soils are irrigated. If areas that will be impacted by proposed improvements are irrigated, Form AD-1006 should be completed and submitted to Natural Resources Conservation Service to evaluate potential impacts to prime farmland.
  - Further investigation of contamination listings continue prior to construction.
  - Additional research into mining contamination continue to determine possible contamination related to area mining and a field evaluation to determine visible signs of contamination prior to final design.
- A public involvement process should continue through all phases of highway development.



Kimley-Horn  
and Associates, Inc.

## VII. APPENDIX

---

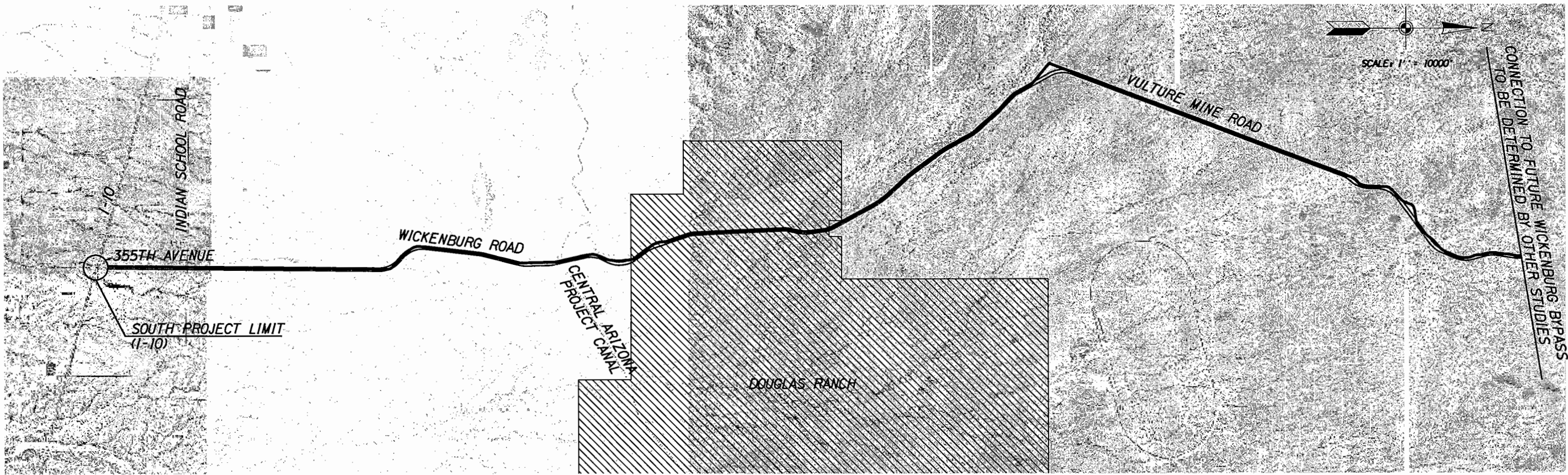
# **APPENDIX A**

## **FEASIBILITY PLANS**

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

CORRIDOR EVALUATION  
FOR  
CANAMEX DESIGNATION  
BETWEEN I-10 AND US93  
(WICKENBURG ROAD – VULTURE MINE ROAD)  
FEASIBILITY PLANS


F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				



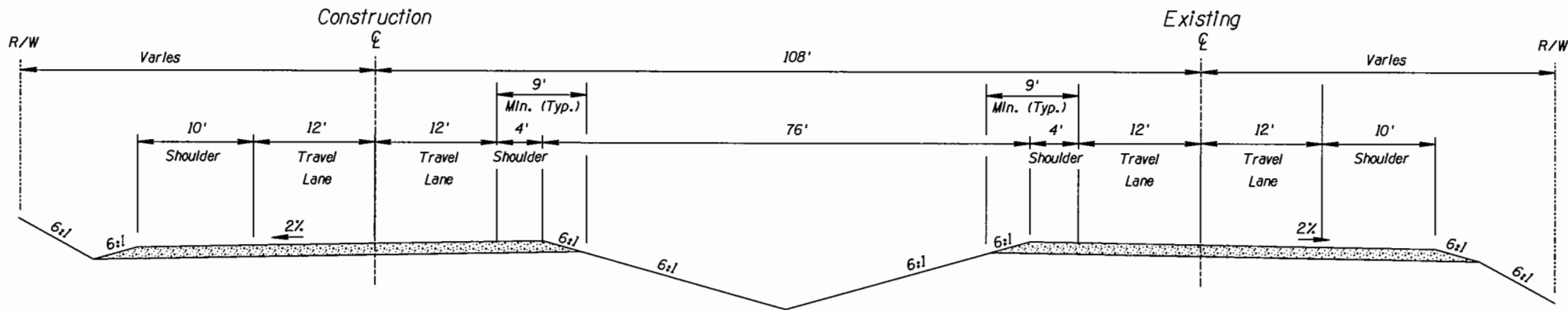
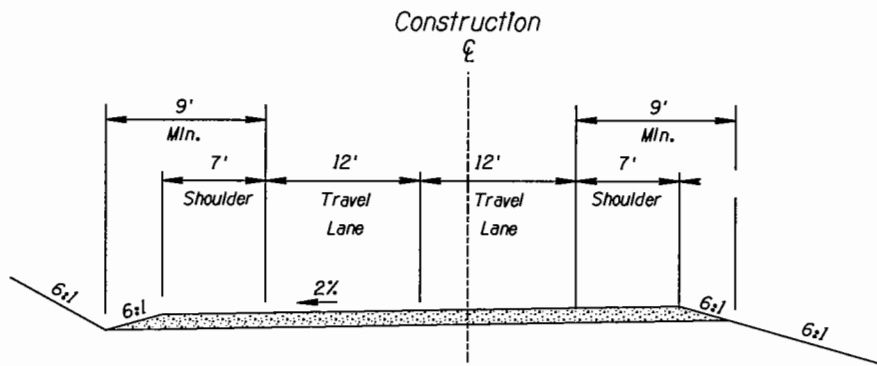
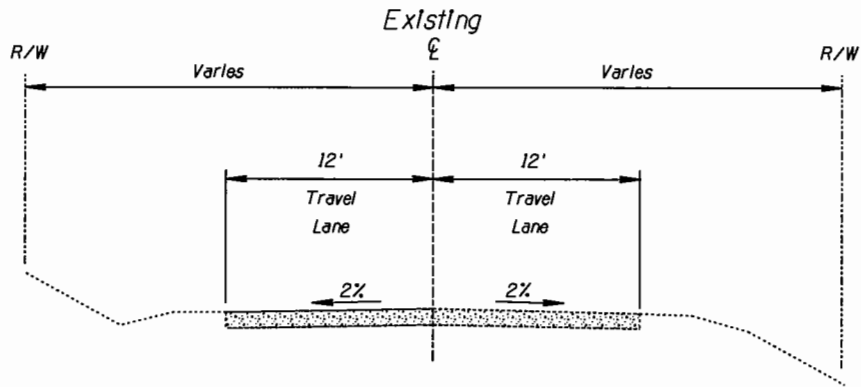
SHEET INDEX	
SHEET #	DESCRIPTION
1	COVER SHEET
2	TYPICAL SECTIONS
3	TYPICAL INTERSECTION
4	WICKENBURG RD/VULTURE MINE RD INTERSECTION
5-16	PLAN AND PROFILE SHEETS

NOTE: THE ALIGNMENTS SHOWN IN THESE PLANS REPRESENT ONE FEASIBLE ALIGNMENT. THIS ALIGNMENT IS SHOWN FOR INFORMATIONAL PURPOSES ONLY AND IS NOT THE FINAL ALIGNMENT OF THE CANAMEX TRADE CORRIDOR. AS THE DEVELOPMENT OF THIS CORRIDOR PROGRESSES IT WILL BE NECESSARY TO DETERMINE THE ACTUAL ALIGNMENT TO BE USED.

COVER SHEET

		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION TRANSPORTATION PLANNING DIVISION CORRIDOR EVALUATION FOR CANAMEX DESIGNATION BETWEEN I-10 AND US93 (WICKENBURG RD/VULTURE MINE RD ALIGNMENT)	PRELIMINARY PLANNING DOCUMENTS NOT FOR CONSTRUCTION
DESIGN	JSW		10/04		
DRAWN	JSW		10/04		
CHECKED	DDP		10/04		
		Kimley-Horn and Associates, Inc. © 1990 KIMLEY-HORN AND ASSOCIATES, INC.			
ROUTE		LOCATION			SHEET 1 OF 16
TRACS NO.					<u>1 OF 16</u>

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				



NOTE: THE ALIGNMENTS SHOWN IN THESE PLANS REPRESENT ONE FEASIBLE ALIGNMENT. THIS ALIGNMENT IS SHOWN FOR INFORMATIONAL PURPOSES ONLY AND IS NOT THE FINAL ALIGNMENT OF THE CANAMEX TRADE CORRIDOR. AS THE DEVELOPMENT OF THIS CORRIDOR PROGRESSES IT WILL BE NECESSARY TO DETERMINE THE ACTUAL ALIGNMENT TO BE USED.

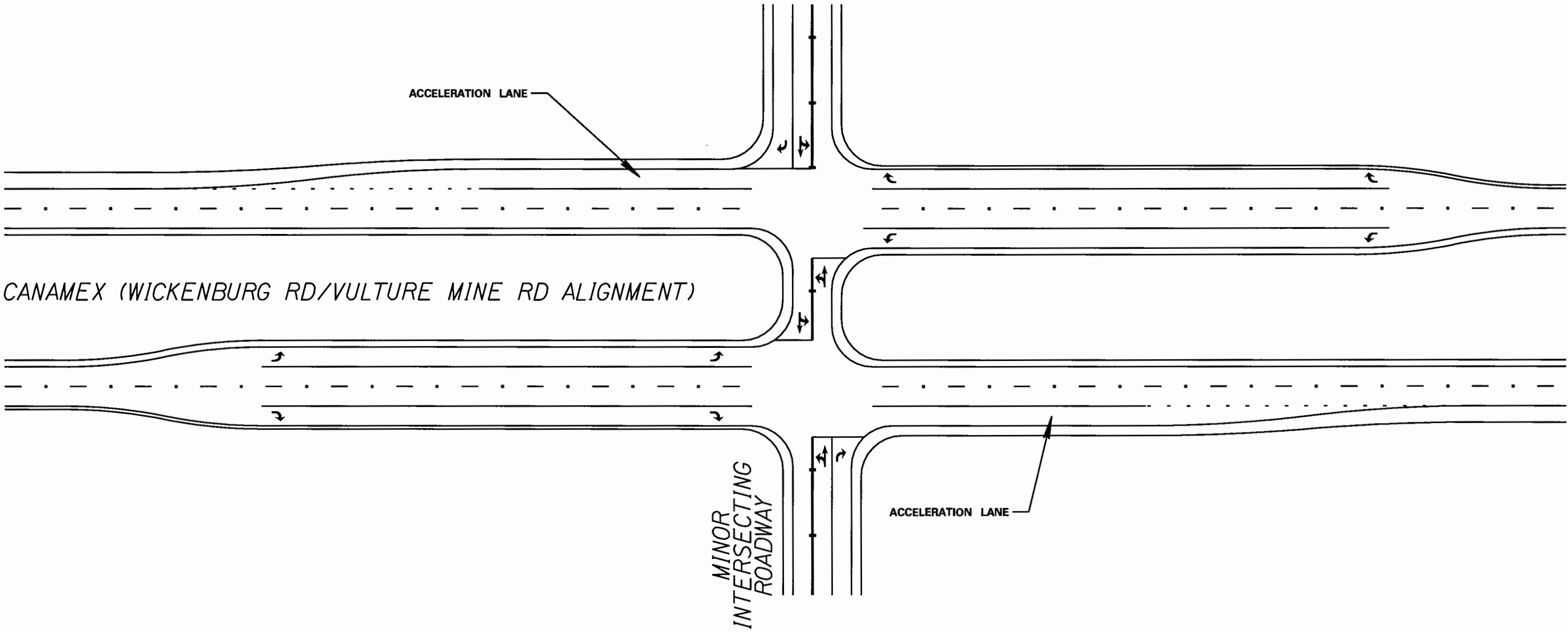
### TYPICAL SECTIONS

DESIGN	JSW	DATE	10/04	ARIZONA DEPARTMENT OF TRANSPORTATION	PRELIMINARY PLANNING DOCUMENTS NOT FOR CONSTRUCTION
DRAWN	JSW	DATE	10/04	TRANSPORTATION PLANNING DIVISION	
CHECKED	DDP	DATE	10/04	CORRIDOR EVALUATION FOR CANAMEX DESIGNATION BETWEEN I-10 AND US93 (WICKENBURG RD/VULTURE MINE RD ALIGNMENT)	
Kimley-Horn and Associates, Inc.					
ROUTE		LOCATION			SHEET 2 OF 16
TRACS NO.					2 OF 16

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				


AT-GRADE INTERSECTIONS SUCH AS THIS ARE INTERIM TREATMENTS  
TO BE USED UNTIL SUCH TIME AS FULL ACCESS CONTROL IS  
IMPLEMENTED.



TYPICAL INTERSECTION

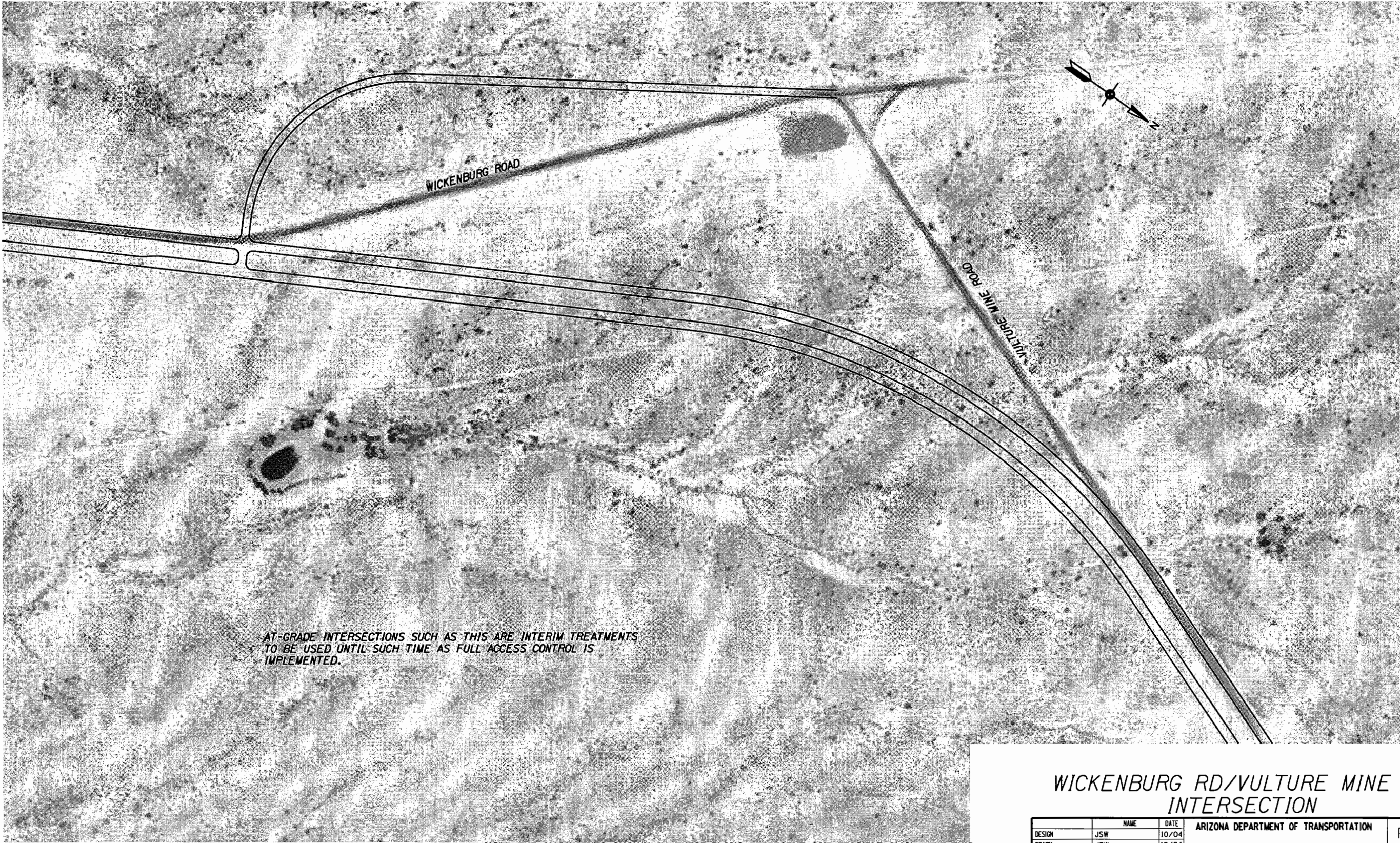
NOTE: THE ALIGNMENTS SHOWN IN THESE PLANS REPRESENT ONE FEASIBLE ALIGNMENT. THIS ALIGNMENT IS SHOWN FOR INFORMATIONAL PURPOSES ONLY AND IS NOT THE FINAL ALIGNMENT OF THE CANAMEX TRADE CORRIDOR. AS THE DEVELOPMENT OF THIS CORRIDOR PROGRESSES IT WILL BE NECESSARY TO DETERMINE THE ACTUAL ALIGNMENT TO BE USED.

SCALE: N.T.S.

		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION		PRELIMINARY PLANNING DOCUMENTS NOT FOR CONSTRUCTION
DESIGN	JSW		10/04	TRANSPORTATION PLANNING DIVISION		
DRAWN	JSW		10/04	CORRIDOR EVALUATION FOR CANAMEX DESIGNATION BETWEEN I-10 AND US93		
CHECKED	DDP		10/04	(WICKENBURG RD/VULTURE MINE RD ALIGNMENT)		
		Kimley-Horn and Associates, Inc.				SHEET 3 OF 16
ROUTE		LOCATION				
TRACS NO.						<u>3 OF 16</u>




F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				



AT-GRADE INTERSECTIONS SUCH AS THIS ARE INTERIM TREATMENTS TO BE USED UNTIL SUCH TIME AS FULL ACCESS CONTROL IS IMPLEMENTED.

NOTE: THE ALIGNMENTS SHOWN IN THESE PLANS REPRESENT ONE FEASIBLE ALIGNMENT. THIS ALIGNMENT IS SHOWN FOR INFORMATIONAL PURPOSES ONLY AND IS NOT THE FINAL ALIGNMENT OF THE CANAMEX TRADE CORRIDOR. AS THE DEVELOPMENT OF THIS CORRIDOR PROGRESSES IT WILL BE NECESSARY TO DETERMINE THE ACTUAL ALIGNMENT TO BE USED.

# WICKENBURG RD/VULTURE MINE RD INTERSECTION

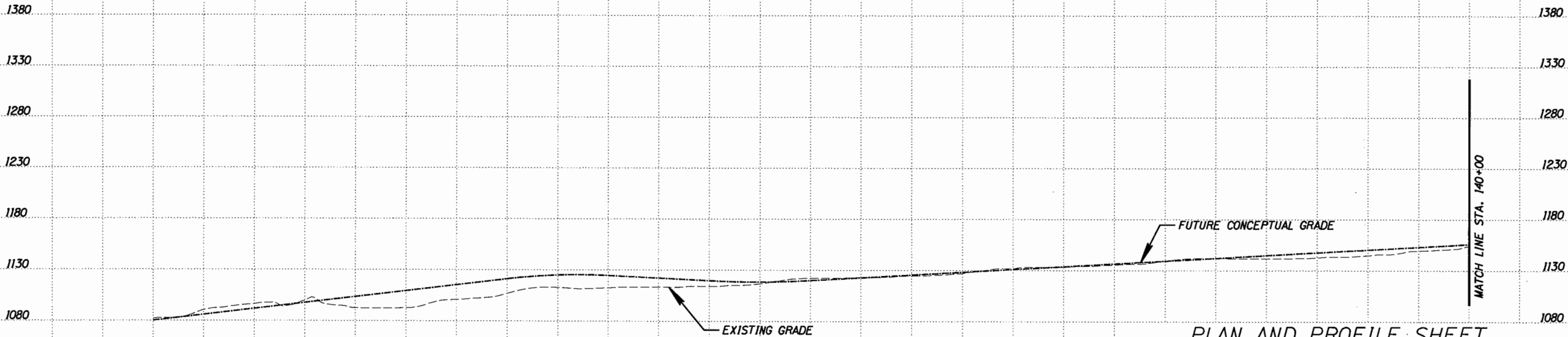
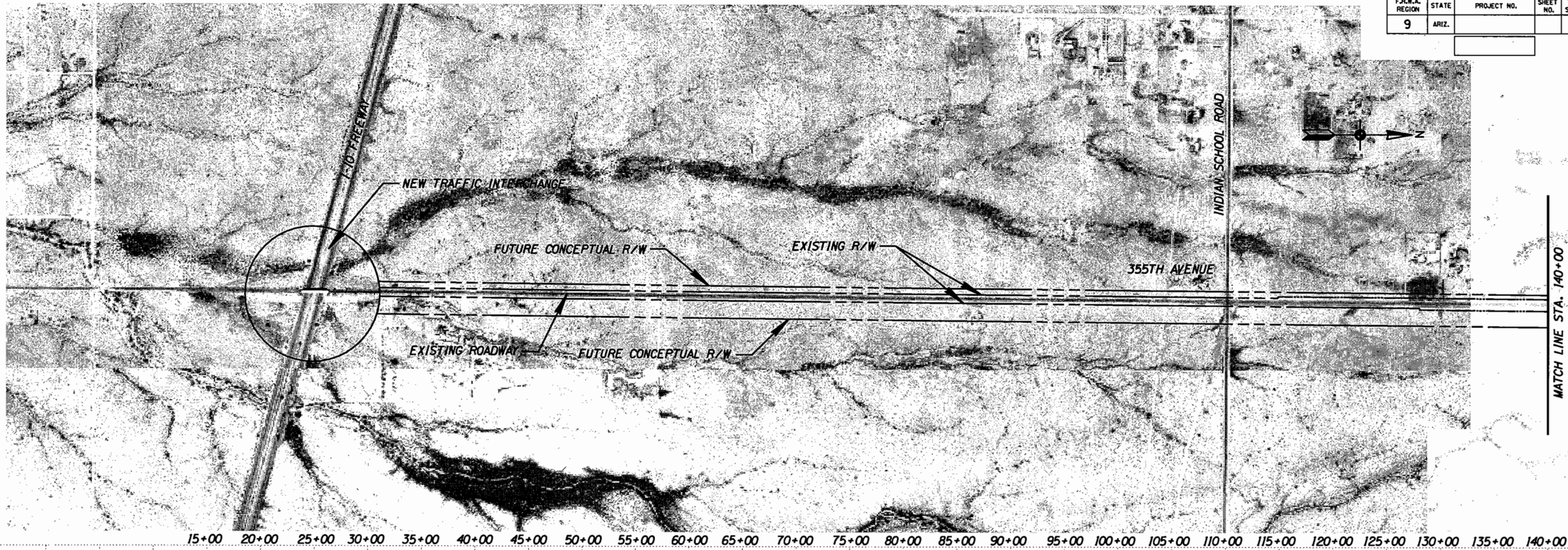
		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION		PRELIMINARY PLANNING DOCUMENTS NOT FOR CONSTRUCTION
DESIGN	JSW		10/04	TRANSPORTATION PLANNING DIVISION		
DRAWN	JSW		10/04			
CHECKED	DDP		10/04	CORRIDOR EVALUATION FOR CANAMEX DESIGNATION BETWEEN I-10 AND US93 (WICKENBURG RD/VULTURE MINE RD ALIGNMENT)		
 Kimley-Horn and Associates, Inc. ©2000 KIMLEY-HORN AND ASSOCIATES, INC.						
ROUTE		LOCATION				SHEET 4 OF 16
TRACS NO.						<u>4 OF 16</u>

SCALE: 1" = 400'

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				



NOTE: THE ALIGNMENTS SHOWN IN THESE PLANS REPRESENT ONE FEASIBLE ALIGNMENT. THIS ALIGNMENT IS SHOWN FOR INFORMATIONAL PURPOSES ONLY AND IS NOT THE FINAL ALIGNMENT OF THE CANAMEX TRADE CORRIDOR. AS THE DEVELOPMENT OF THIS CORRIDOR PROGRESSES IT WILL BE NECESSARY TO DETERMINE THE ACTUAL ALIGNMENT TO BE USED.

# PLAN AND PROFILE SHEET

DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION
DRAWN	JSW	10/04	TRANSPORTATION PLANNING DIVISION
CHECKED	DDP	10/04	CORRIDOR EVALUATION FOR CANAMEX DESIGNATION BETWEEN I-10 AND US93 (WICKENBURG RD/VULTURE MINE RD ALIGNMENT)
ROUTE	LOCATION		
TRACS NO.			

PRELIMINARY  
PLANNING  
DOCUMENTS  
NOT FOR  
CONSTRUCTION

SHEET 5 OF 16

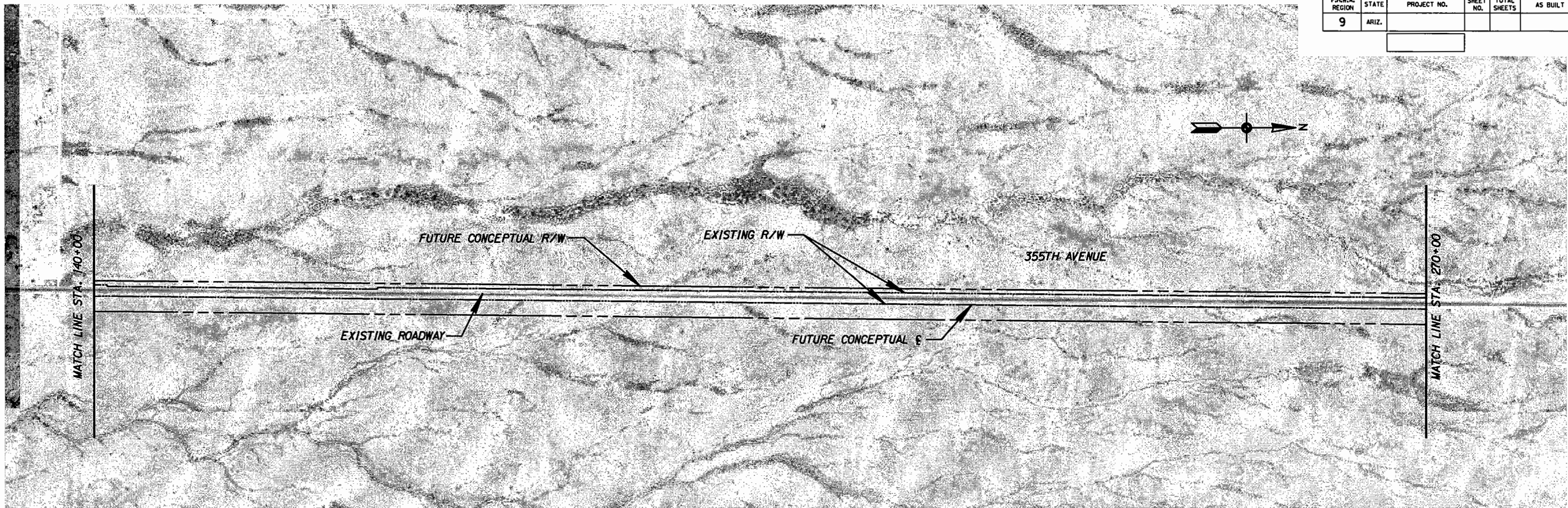
5 OF 16

SCALE: 1" = 1000'

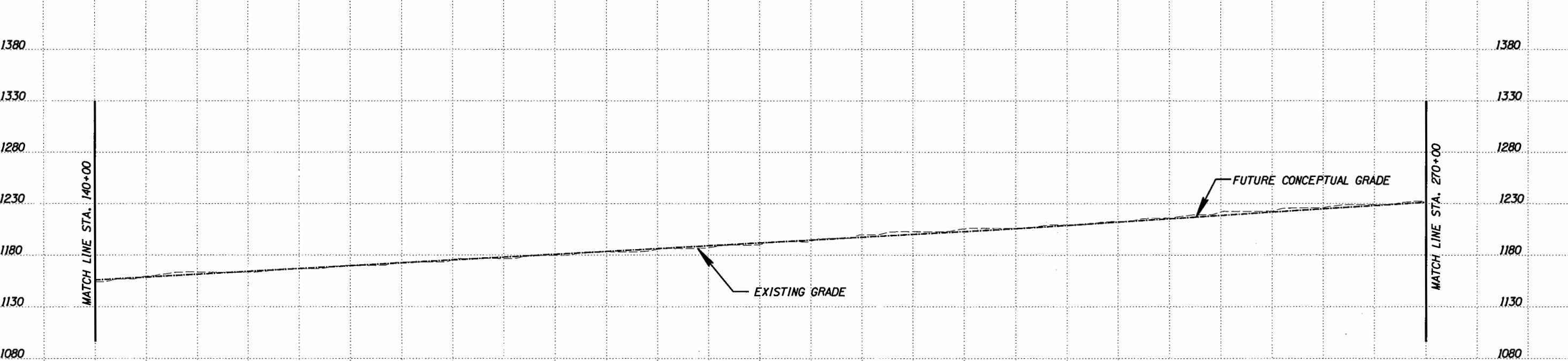


DATE: LOCATION: REVISIONS: FINISHED PLANS: SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				



140+00 145+00 150+00 155+00 160+00 165+00 170+00 175+00 180+00 185+00 190+00 195+00 200+00 205+00 210+00 215+00 220+00 225+00 230+00 235+00 240+00 245+00 250+00 255+00 260+00 265+00 270+00



NOTE: THE ALIGNMENTS SHOWN IN THESE PLANS REPRESENT ONE FEASIBLE ALIGNMENT. THIS ALIGNMENT IS SHOWN FOR INFORMATIONAL PURPOSES ONLY AND IS NOT THE FINAL ALIGNMENT OF THE CANAMEX TRADE CORRIDOR. AS THE DEVELOPMENT OF THIS CORRIDOR PROGRESSES IT WILL BE NECESSARY TO DETERMINE THE ACTUAL ALIGNMENT TO BE USED.

PLAN AND PROFILE SHEET

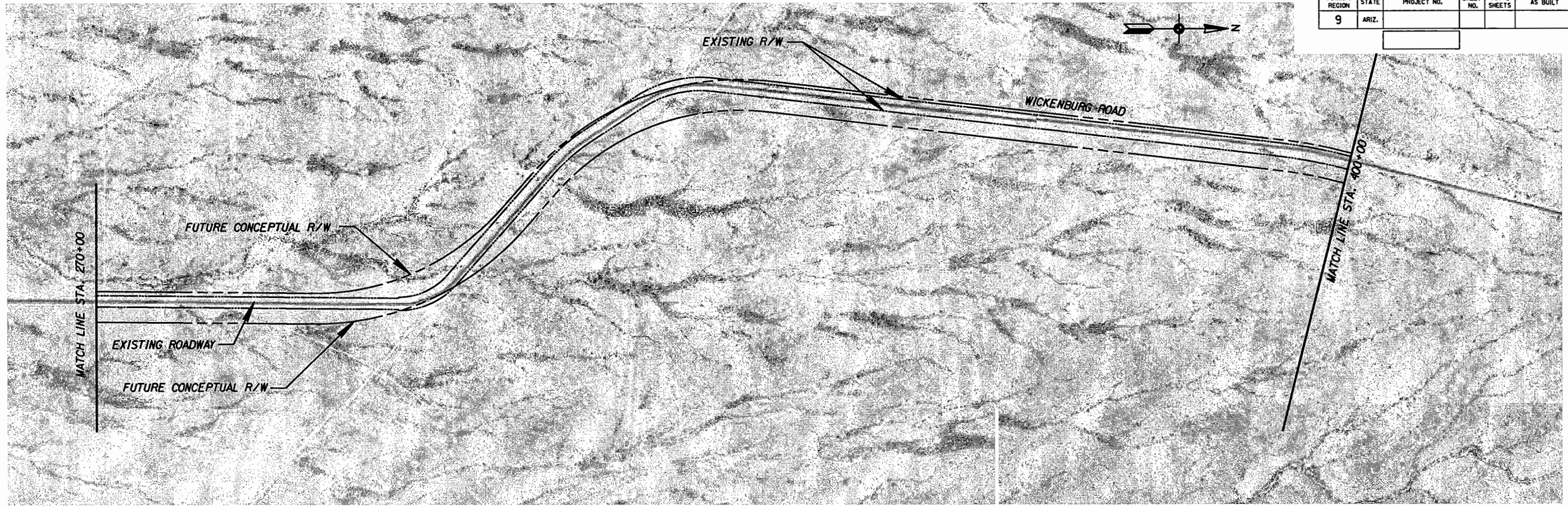
DESIGN	JSW	DATE	10/04	ARIZONA DEPARTMENT OF TRANSPORTATION TRANSPORTATION PLANNING DIVISION CORRIDOR EVALUATION FOR CANAMEX DESIGNATION BETWEEN I-10 AND US93 (WICKENBURG RD/VULTURE MINE RD ALIGNMENT)	PRELIMINARY PLANNING DOCUMENTS NOT FOR CONSTRUCTION
DRAWN	JSW	DATE	10/04		
CHECKED	DDP	DATE	10/04		
ROUTE		LOCATION		SHEET 6 OF 16	
TRACS NO.				6 OF 16	

SCALE: 1" = 1000'

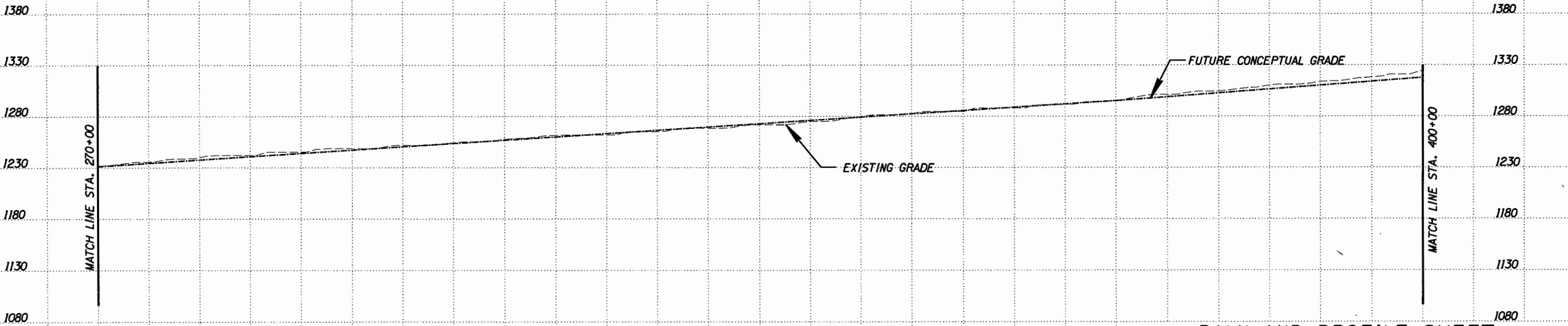


DATE: LOCATION: REVISIONS: SURVEY NO. DATE: LOCATION: REVISIONS: SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				



270+00 275+00 280+00 285+00 290+00 295+00 300+00 305+00 310+00 315+00 320+00 325+00 330+00 335+00 340+00 345+00 350+00 355+00 360+00 365+00 370+00 375+00 380+00 385+00 390+00 395+00 400+00



NOTE: THE ALIGNMENTS SHOWN IN THESE PLANS REPRESENT ONE FEASIBLE ALIGNMENT. THIS ALIGNMENT IS SHOWN FOR INFORMATIONAL PURPOSES ONLY AND IS NOT THE FINAL ALIGNMENT OF THE CANAMEX TRADE CORRIDOR. AS THE DEVELOPMENT OF THIS CORRIDOR PROGRESSES IT WILL BE NECESSARY TO DETERMINE THE ACTUAL ALIGNMENT TO BE USED.

SCALE: 1" = 1000'

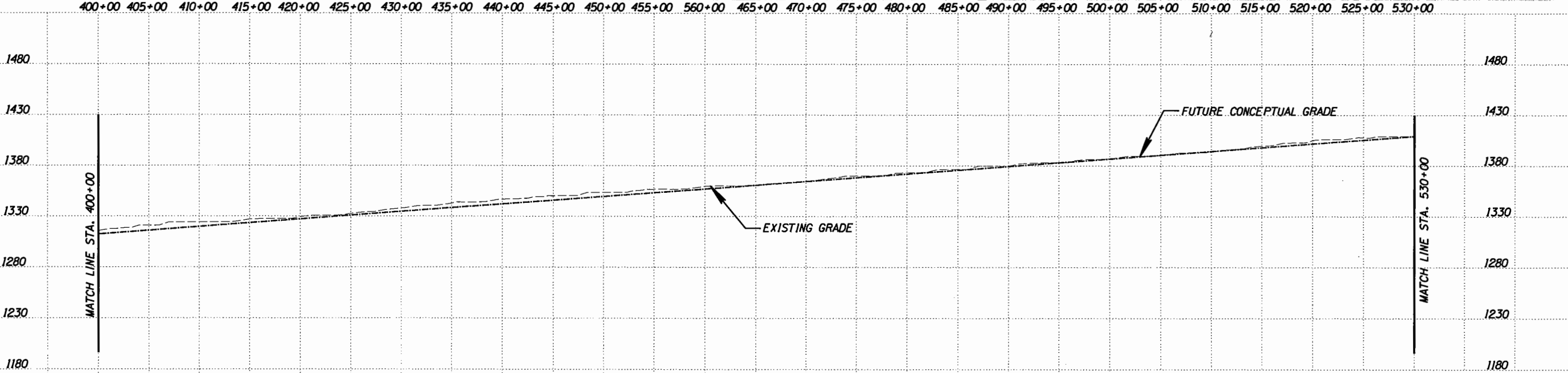
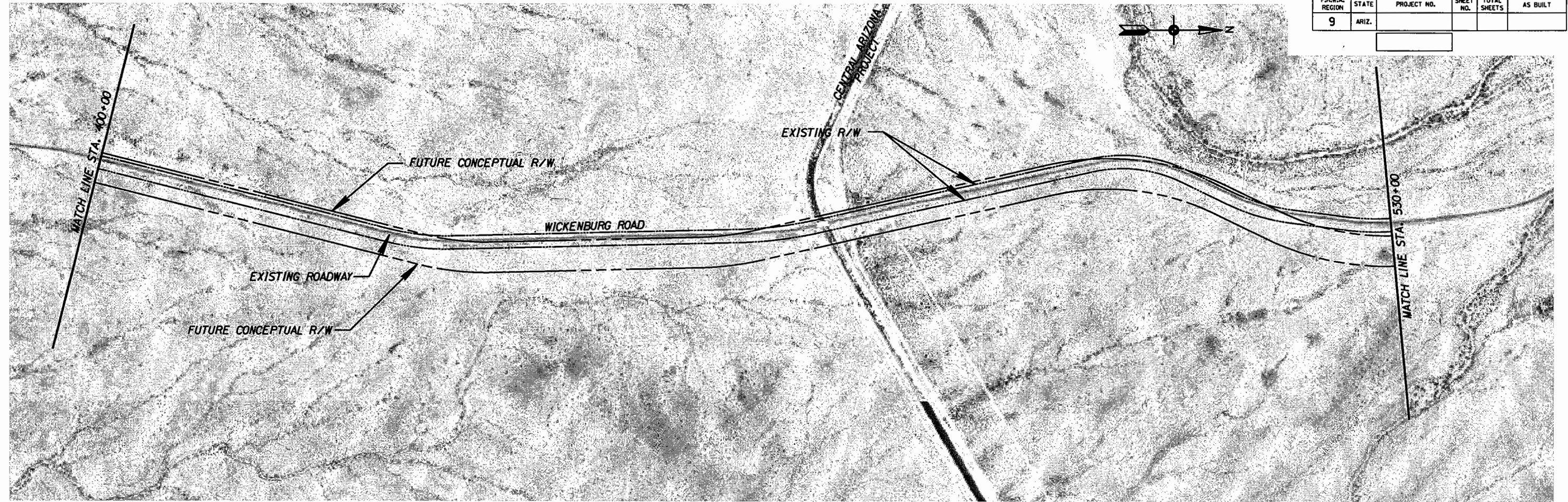
### PALN AND PROFILE SHEET

DESIGN	JSW	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION	
DRAWN	JSW		10/04	TRANSPORTATION PLANNING DIVISION	
CHECKED	DDP		10/04	CORRIDOR EVALUATION FOR CANAMEX DESIGNATION BETWEEN I-10 AND US93 (WICKENBURG RD/VULTURE MINE RD ALIGNMENT)	
ROUTE		LOCATION		PRELIMINARY PLANNING DOCUMENTS NOT FOR CONSTRUCTION	
TRACS NO.				SHEET 7 OF 16	
				7 OF 16	



DATE: LOCATION: REVISIONS: FINISHED PLANS: SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				



NOTE: THE ALIGNMENTS SHOWN IN THESE PLANS REPRESENT ONE FEASIBLE ALIGNMENT. THIS ALIGNMENT IS SHOWN FOR INFORMATIONAL PURPOSES ONLY AND IS NOT THE FINAL ALIGNMENT OF THE CANAMEX TRADE CORRIDOR. AS THE DEVELOPMENT OF THIS CORRIDOR PROGRESSES IT WILL BE NECESSARY TO DETERMINE THE ACTUAL ALIGNMENT TO BE USED.

SCALE: 1" = 1000'

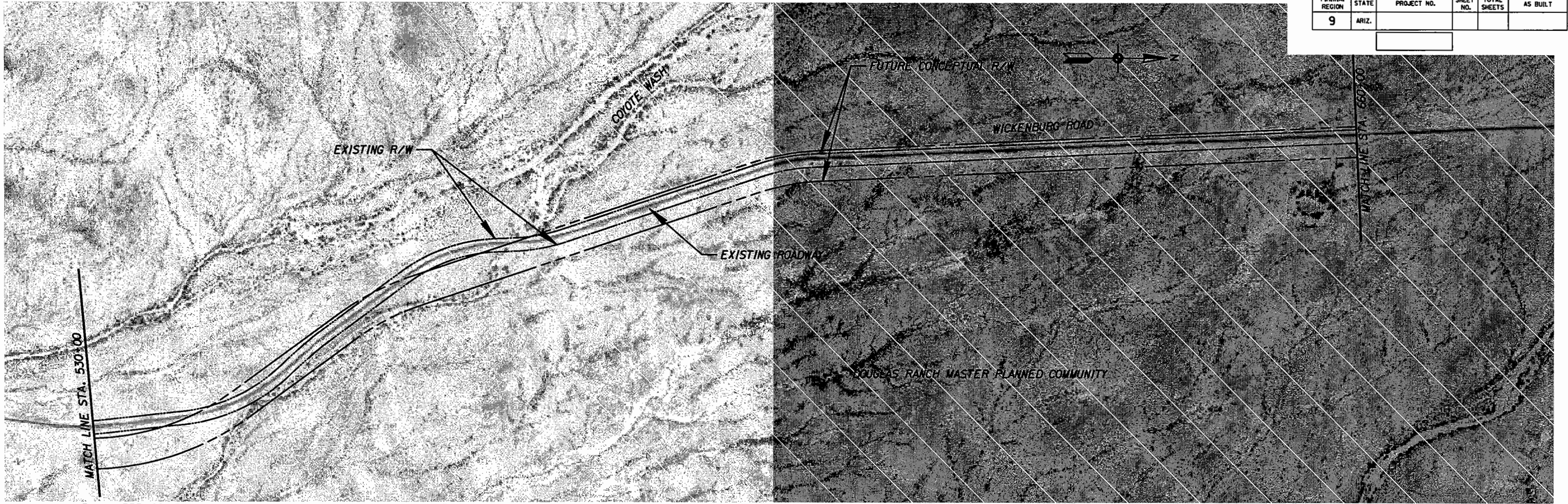
### PLAN AND PROFILE SHEET

DESIGN	JSW	DATE	10/04	ARIZONA DEPARTMENT OF TRANSPORTATION TRANSPORTATION PLANNING DIVISION CORRIDOR EVALUATION FOR CANAMEX DESIGNATION BETWEEN I-10 AND US93 (WICKENBURG RD/VULTURE MINE RD ALIGNMENT)	PRELIMINARY PLANNING DOCUMENTS NOT FOR CONSTRUCTION
DRAWN	JSW	DATE	10/04		
CHECKED	DDP	DATE	10/04		
ROUTE		LOCATION		SHEET 8 OF 16	
TRACS NO.				8 OF 16	

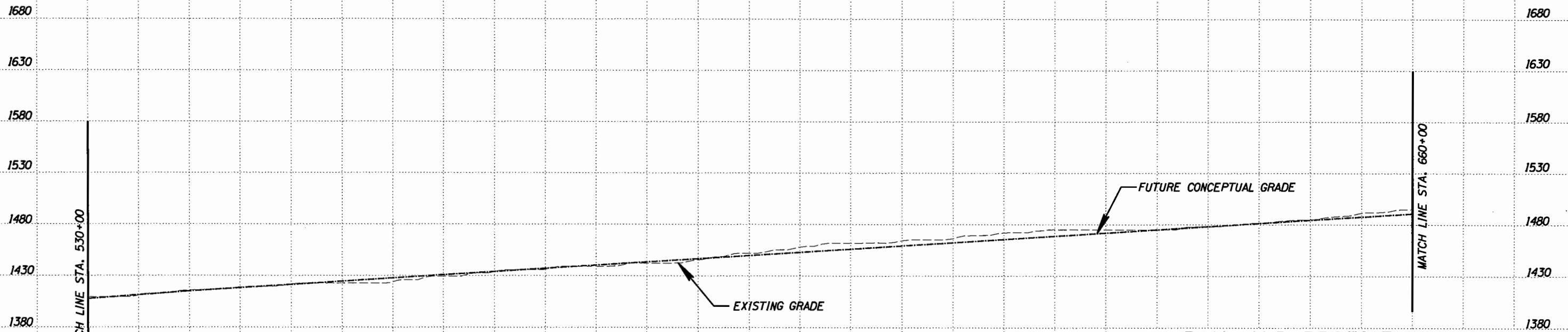


DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				



530+00 535+00 540+00 545+00 550+00 555+00 560+00 565+00 570+00 575+00 580+00 585+00 590+00 595+00 600+00 605+00 610+00 615+00 620+00 625+00 630+00 635+00 640+00 645+00 650+00 655+00 660+00



NOTE: THE ALIGNMENTS SHOWN IN THESE PLANS REPRESENT ONE FEASIBLE ALIGNMENT. THIS ALIGNMENT IS SHOWN FOR INFORMATIONAL PURPOSES ONLY AND IS NOT THE FINAL ALIGNMENT OF THE CANAMEX TRADE CORRIDOR. AS THE DEVELOPMENT OF THIS CORRIDOR PROGRESSES IT WILL BE NECESSARY TO DETERMINE THE ACTUAL ALIGNMENT TO BE USED.

### PLAN AND PROFILE SHEET

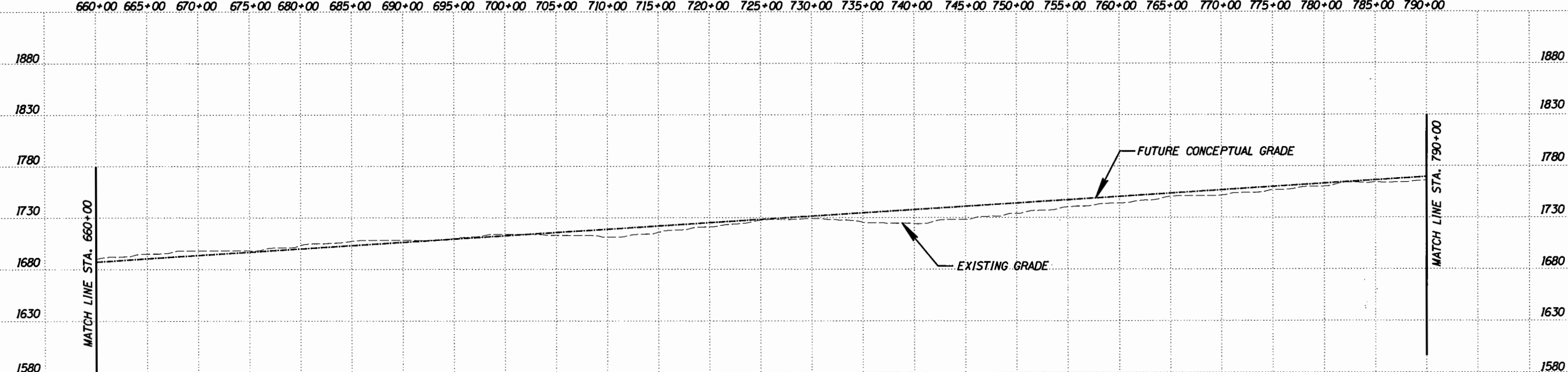
DESIGN	JSW	DATE	10/04	ARIZONA DEPARTMENT OF TRANSPORTATION TRANSPORTATION PLANNING DIVISION CORRIDOR EVALUATION FOR CANAMEX DESIGNATION BETWEEN I-10 AND US93 (WICKENBURG RD/VULTURE MINE RD ALIGNMENT)	PRELIMINARY PLANNING DOCUMENTS NOT FOR CONSTRUCTION
DRAWN	JSW	DATE	10/04		
CHECKED	DDP	DATE	10/04		
ROUTE		LOCATION		SHEET 9 OF 16	
TRACS NO.				9 OF 16	

SCALE: 1" = 1000'



DATE: LOCATION: REVISIONS: SURVEY NO. FINISHED PLANS: DATE: LOCATION: REVISIONS: SURVEY NO. FINISHED PLANS:

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				



NOTE: THE ALIGNMENTS SHOWN IN THESE PLANS REPRESENT ONE FEASIBLE ALIGNMENT. THIS ALIGNMENT IS SHOWN FOR INFORMATIONAL PURPOSES ONLY AND IS NOT THE FINAL ALIGNMENT OF THE CANAMEX TRADE CORRIDOR. AS THE DEVELOPMENT OF THIS CORRIDOR PROGRESSES IT WILL BE NECESSARY TO DETERMINE THE ACTUAL ALIGNMENT TO BE USED.

SCALE: 1" = 1000'

### PLAN AND PROFILE SHEET

DESIGN	JSW	DATE	10/04
DRAWN	JSW	DATE	10/04
CHECKED	DDP	DATE	10/04
ROUTE		LOCATION	
ARIZONA DEPARTMENT OF TRANSPORTATION TRANSPORTATION PLANNING DIVISION CORRIDOR EVALUATION FOR CANAMEX DESIGNATION BETWEEN I-10 AND US93 (WICKENBURG RD/VULTURE MINE RD ALIGNMENT)			
TRACS NO.		SHEET 10 OF 16	

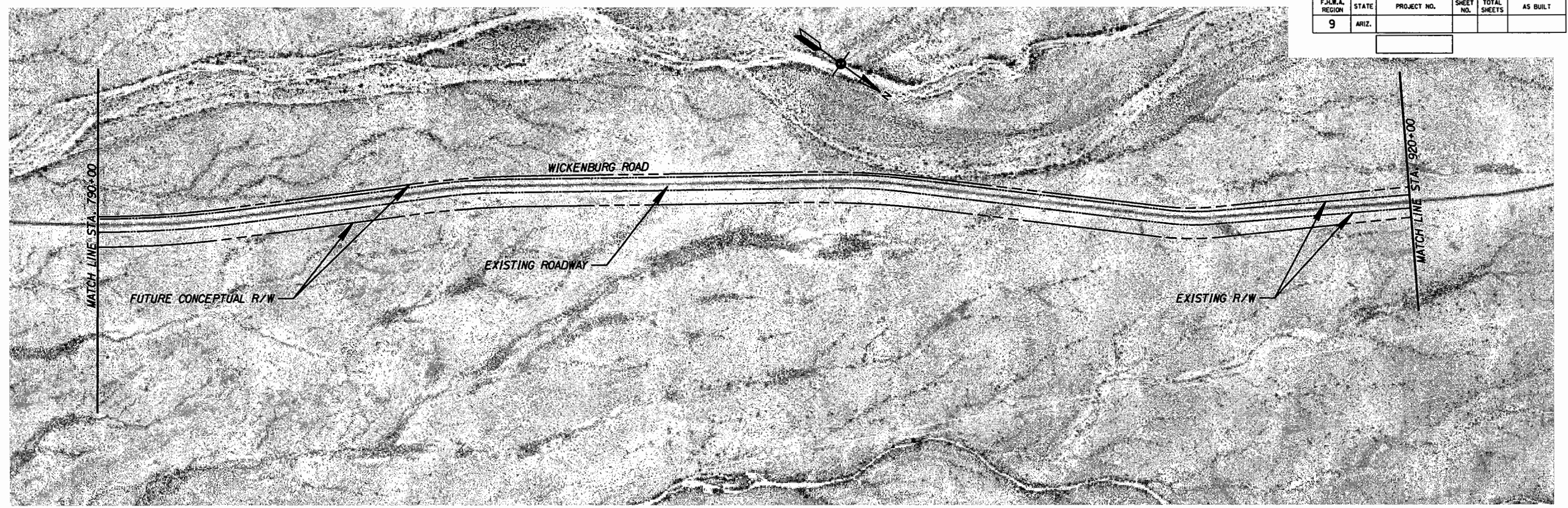
PRELIMINARY PLANNING DOCUMENTS NOT FOR CONSTRUCTION

10 OF 16

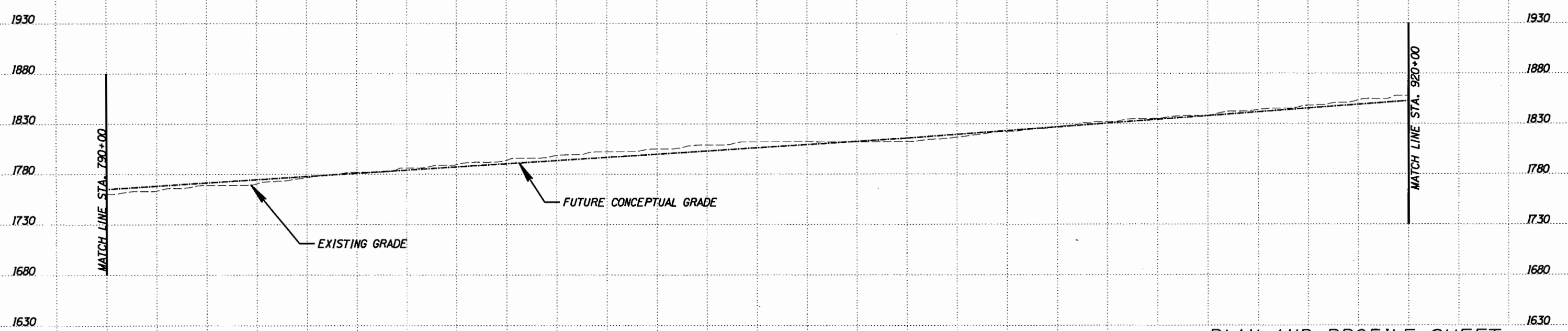


DATE: LOCATION: REVISIONS: FINISHED PLANS: SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				



790+00 795+00 800+00 805+00 810+00 815+00 820+00 825+00 830+00 835+00 840+00 845+00 850+00 855+00 860+00 865+00 870+00 875+00 880+00 885+00 890+00 895+00 900+00 905+00 910+00 915+00 920+00



NOTE: THE ALIGNMENTS SHOWN IN THESE PLANS REPRESENT ONE FEASIBLE ALIGNMENT. THIS ALIGNMENT IS SHOWN FOR INFORMATIONAL PURPOSES ONLY AND IS NOT THE FINAL ALIGNMENT OF THE CANAMEX TRADE CORRIDOR. AS THE DEVELOPMENT OF THIS CORRIDOR PROGRESSES IT WILL BE NECESSARY TO DETERMINE THE ACTUAL ALIGNMENT TO BE USED.

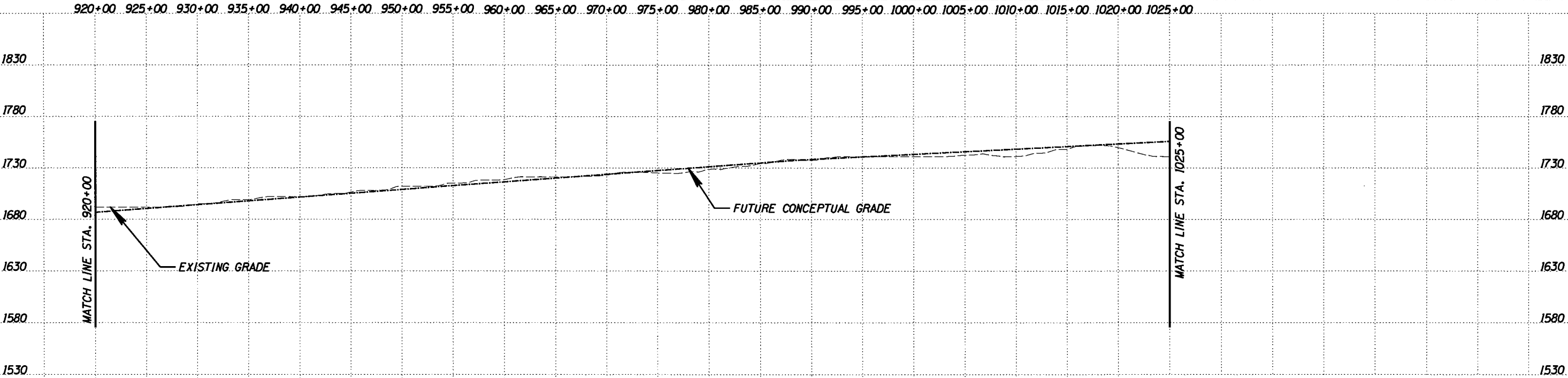
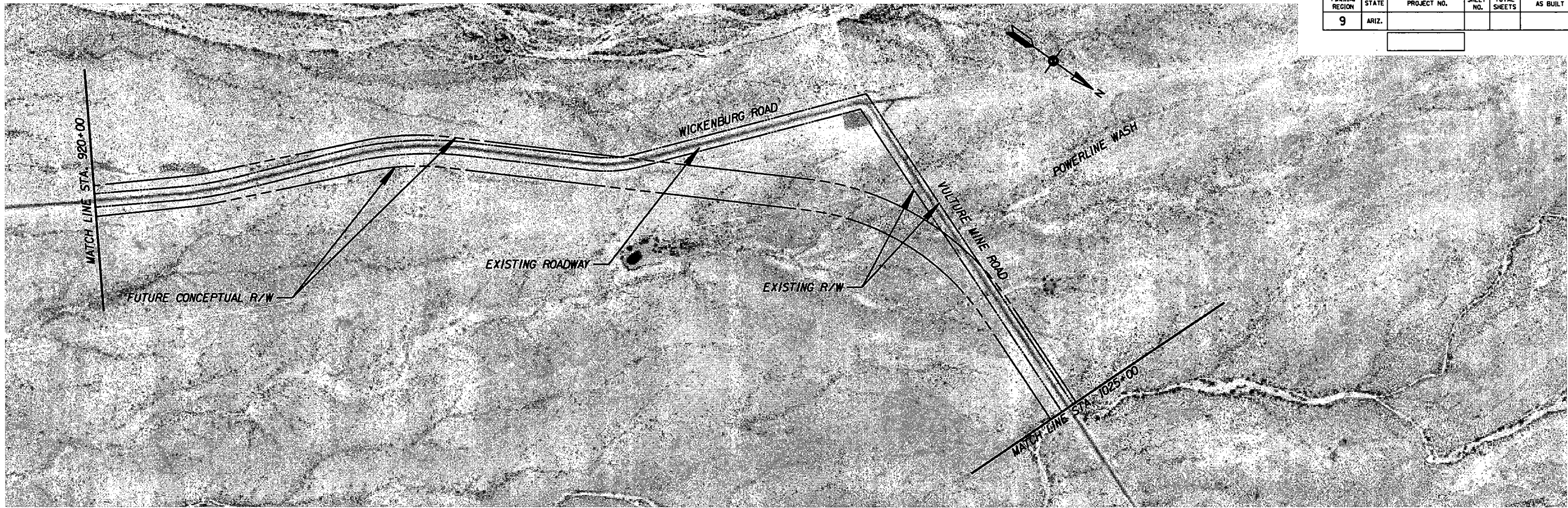
SCALE: 1" = 1000'

### PLAN AND PROFILE SHEET

DESIGN	JSW	DATE	10/04	ARIZONA DEPARTMENT OF TRANSPORTATION TRANSPORTATION PLANNING DIVISION CORRIDOR EVALUATION FOR CANAMEX DESIGNATION BETWEEN I-10 AND US93 (WICKENBURG RD/VULTURE MINE RD ALIGNMENT)	PRELIMINARY PLANNING DOCUMENTS NOT FOR CONSTRUCTION
DRAWN	JSW	DATE	10/04		
CHECKED	DDP	DATE	10/04		
ROUTE		LOCATION		SHEET 11 OF 16	
TRACS NO.				11 OF 16	



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				



NOTE: THE ALIGNMENTS SHOWN IN THESE PLANS REPRESENT ONE FEASIBLE ALIGNMENT. THIS ALIGNMENT IS SHOWN FOR INFORMATIONAL PURPOSES ONLY AND IS NOT THE FINAL ALIGNMENT OF THE CANAMEX TRADE CORRIDOR. AS THE DEVELOPMENT OF THIS CORRIDOR PROGRESSES IT WILL BE NECESSARY TO DETERMINE THE ACTUAL ALIGNMENT TO BE USED.

### PLAN AND PROFILE SHEET

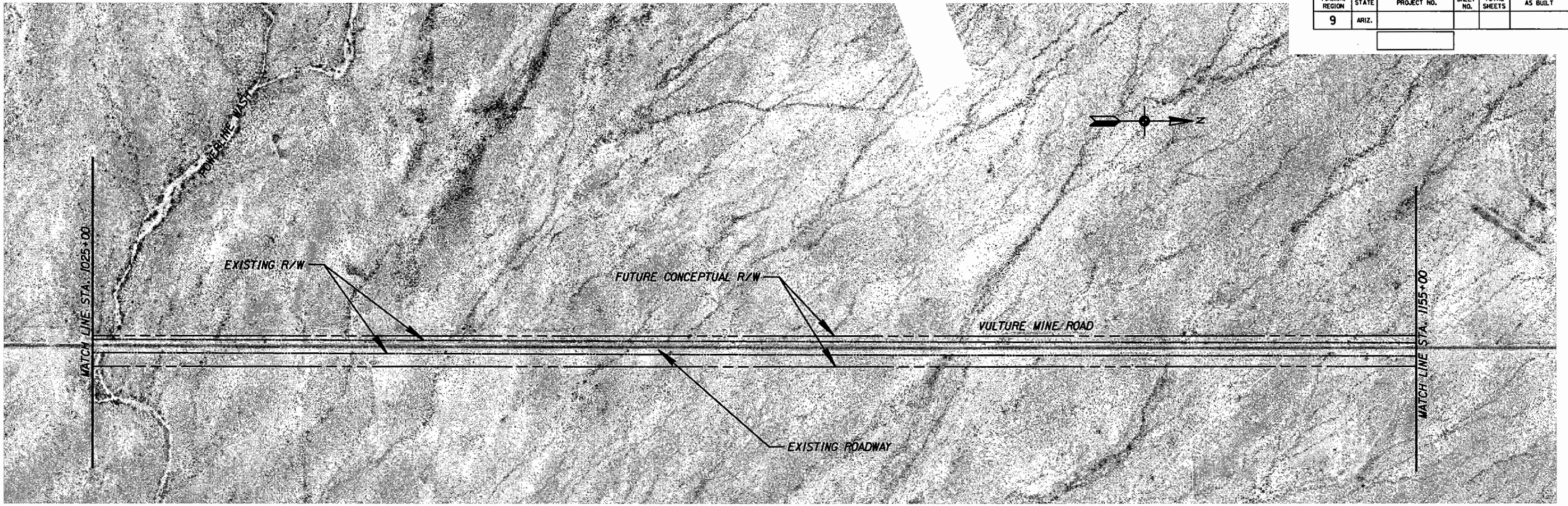
DESIGN		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION		PRELIMINARY PLANNING DOCUMENTS NOT FOR CONSTRUCTION
DRAWN		JSW	10/04	TRANSPORTATION PLANNING DIVISION		
CHECKED		DDP	10/04	CORRIDOR EVALUATION FOR CANAMEX DESIGNATION BETWEEN I-10 AND US93 (WICKENBURG RD/VULTURE MINE RD ALIGNMENT)		
ROUTE		LOCATION		SHEET 12 OF 16		12 OF 16
TRACS NO.						

SCALE: 1" = 1000'

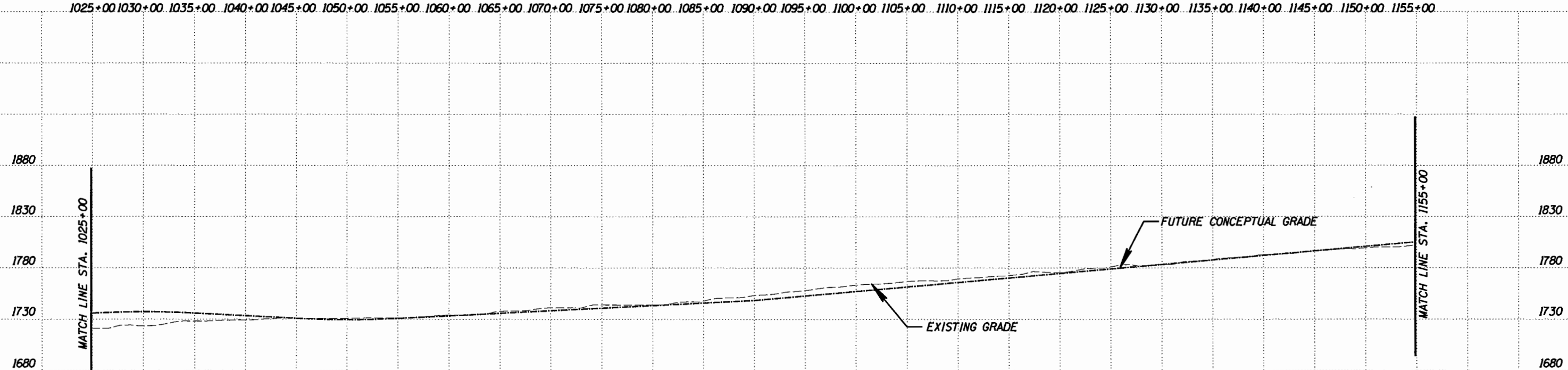


DATE: LOCATION: REVISIONS: FINISHED PLANS: SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				



1025+00 1030+00 1035+00 1040+00 1045+00 1050+00 1055+00 1060+00 1065+00 1070+00 1075+00 1080+00 1085+00 1090+00 1095+00 1100+00 1105+00 1110+00 1115+00 1120+00 1125+00 1130+00 1135+00 1140+00 1145+00 1150+00 1155+00



NOTE: THE ALIGNMENTS SHOWN IN THESE PLANS REPRESENT ONE FEASIBLE ALIGNMENT. THIS ALIGNMENT IS SHOWN FOR INFORMATIONAL PURPOSES ONLY AND IS NOT THE FINAL ALIGNMENT OF THE CANAMEX TRADE CORRIDOR. AS THE DEVELOPMENT OF THIS CORRIDOR PROGRESSES IT WILL BE NECESSARY TO DETERMINE THE ACTUAL ALIGNMENT TO BE USED.

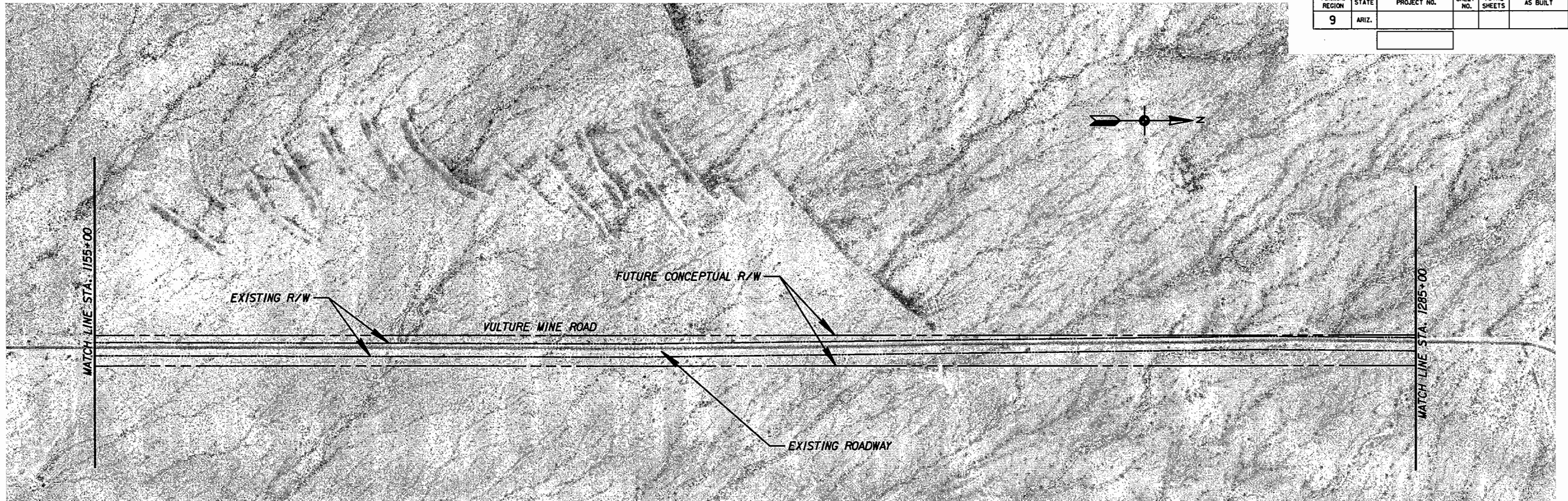
### PLAN AND PROFILE SHEET

DESIGN	JSW	DATE	10/04	ARIZONA DEPARTMENT OF TRANSPORTATION TRANSPORTATION PLANNING DIVISION CORRIDOR EVALUATION FOR CANAMEX DESIGNATION BETWEEN I-10 AND US93 (WICKENBURG RD/VULTURE MINE RD ALIGNMENT)	PRELIMINARY PLANNING DOCUMENTS NOT FOR CONSTRUCTION
DRAWN	JSW	DATE	10/04		
CHECKED	DDP	DATE	10/04		
ROUTE		LOCATION		SHEET 13 OF 16	
TRACS NO.				13 OF 16	

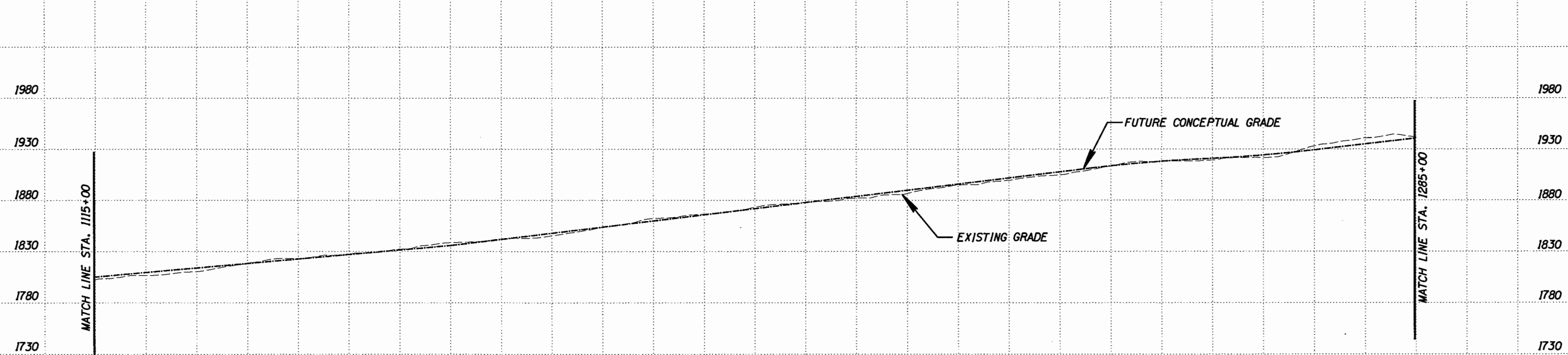
SCALE: 1" = 1000'



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				



1155+00 1160+00 1165+00 1170+00 1175+00 1180+00 1185+00 1190+00 1195+00 1200+00 1205+00 1210+00 1215+00 1220+00 1225+00 1230+00 1235+00 1240+00 1245+00 1250+00 1255+00 1260+00 1265+00 1270+00 1275+00 1280+00 1285+00



PLAN AND PROFILE SHEET

NOTE: THE ALIGNMENTS SHOWN IN THESE PLANS REPRESENT ONE FEASIBLE ALIGNMENT. THIS ALIGNMENT IS SHOWN FOR INFORMATIONAL PURPOSES ONLY AND IS NOT THE FINAL ALIGNMENT OF THE CANAMEX TRADE CORRIDOR. AS THE DEVELOPMENT OF THIS CORRIDOR PROGRESSES IT WILL BE NECESSARY TO DETERMINE THE ACTUAL ALIGNMENT TO BE USED.

SCALE: 1" = 1000'

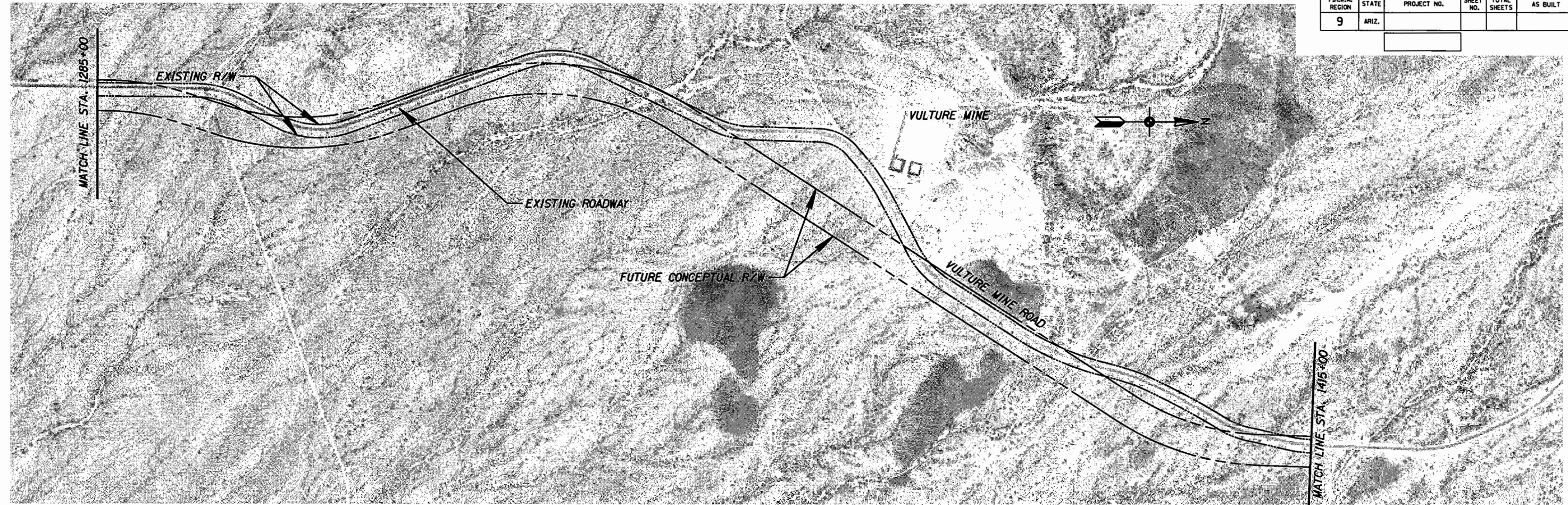
DESIGN		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION		PRELIMINARY PLANNING DOCUMENTS NOT FOR CONSTRUCTION
DRAWN		JSW	10/04	TRANSPORTATION PLANNING DIVISION		
CHECKED		DDP	10/04	CORRIDOR EVALUATION FOR CANAMEX DESIGNATION BETWEEN I-10 AND US93 (WICKENBURG RD/VULTURE MINE RD ALIGNMENT)		
ROUTE		LOCATION		SHEET 14 OF 16		
TRACS NO.						14 OF 16

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

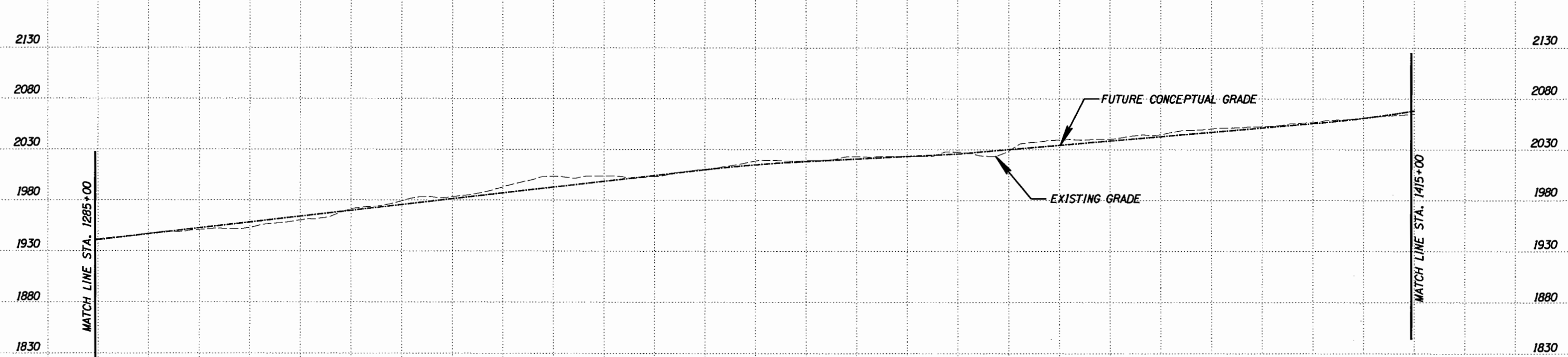


DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

F.H.R.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				




1285+00 1290+00 1295+00 1300+00 1305+00 1310+00 1315+00 1320+00 1325+00 1330+00 1335+00 1340+00 1345+00 1350+00 1355+00 1360+00 1365+00 1370+00 1375+00 1380+00 1385+00 1390+00 1395+00 1400+00 1405+00 1410+00 1415+00



NOTE: THE ALIGNMENTS SHOWN IN THESE PLANS REPRESENT ONE FEASIBLE ALIGNMENT. THIS ALIGNMENT IS SHOWN FOR INFORMATIONAL PURPOSES ONLY AND IS NOT THE FINAL ALIGNMENT OF THE CANAMEX TRADE CORRIDOR. AS THE DEVELOPMENT OF THIS CORRIDOR PROGRESSES IT WILL BE NECESSARY TO DETERMINE THE ACTUAL ALIGNMENT TO BE USED.

SCALE: 1" = 1000'

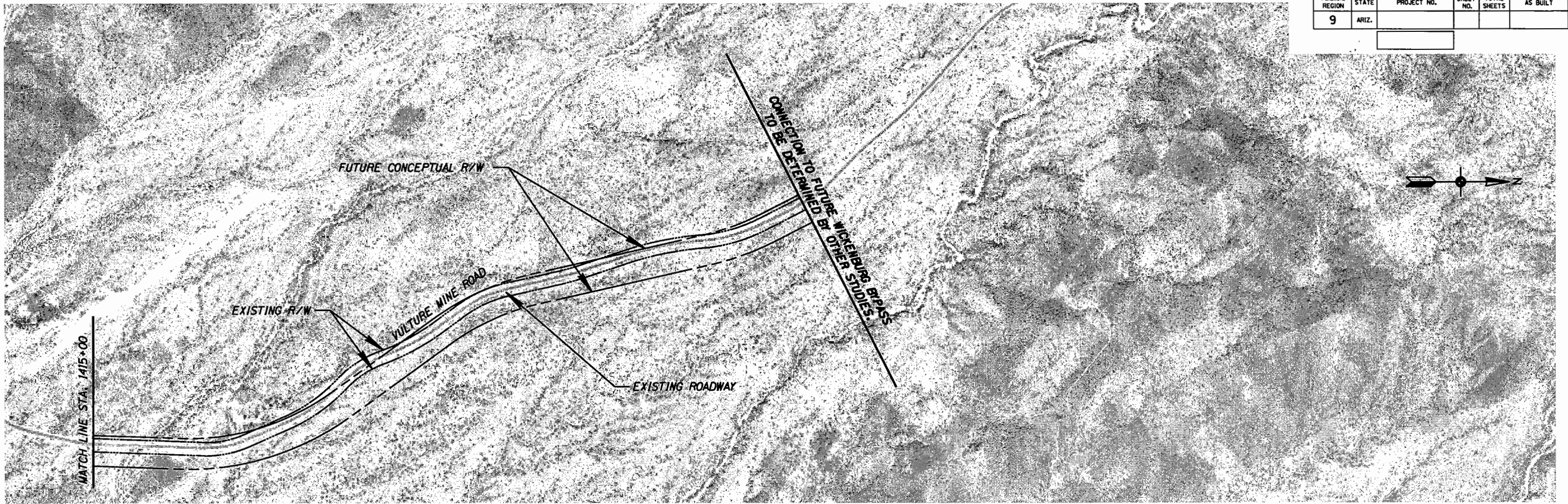
### PLAN AND PROFILE SHEET

		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION  TRANSPORTATION PLANNING DIVISION  CORRIDOR EVALUATION FOR CANAMEX DESIGNATION BETWEEN I-10 AND US93 (WICKENBURG RD/VULTURE MINE RD ALIGNMENT)		PRELIMINARY PLANNING DOCUMENTS NOT FOR CONSTRUCTION
DESIGN		JSW	10/04			
DRAWN		JSW	10/04			
CHECKED		DDP	10/04			
		Kimley-Horn and Associates, Inc.				
©2000 KIMLEY-HORN AND ASSOCIATES, INC.						
ROUTE		LOCATION				SHEET 15 OF 16
TRACS NO.						<u>15 OF 16</u>

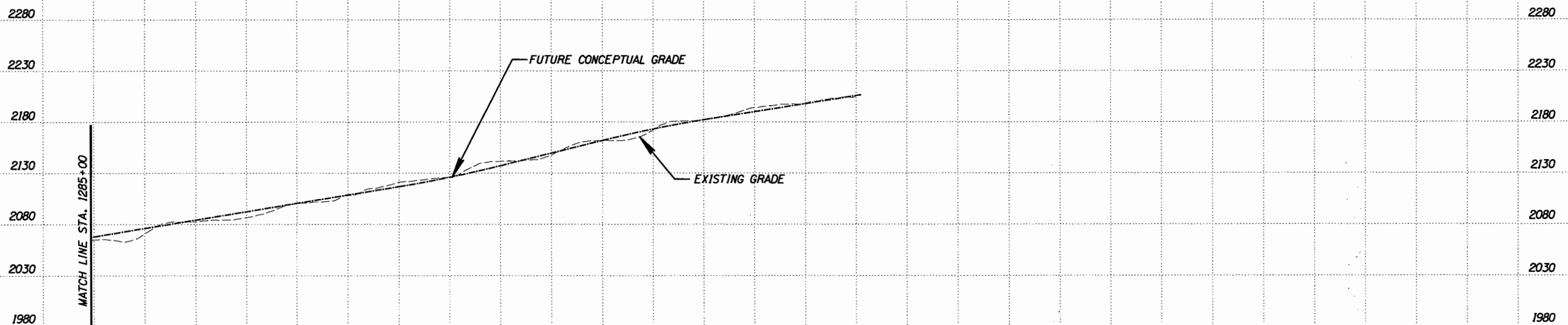


DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				



1415+00 1420+00 1425+00 1430+00 1435+00 1440+00 1445+00 1450+00 1455+00 1460+00 1465+00 1460+00 1475+00 1480+00 1585+00 1490+00 1495+00



NOTE: THE ALIGNMENTS SHOWN IN THESE PLANS REPRESENT ONE FEASIBLE ALIGNMENT. THIS ALIGNMENT IS SHOWN FOR INFORMATIONAL PURPOSES ONLY AND IS NOT THE FINAL ALIGNMENT OF THE CANAMEX TRADE CORRIDOR. AS THE DEVELOPMENT OF THIS CORRIDOR PROGRESSES IT WILL BE NECESSARY TO DETERMINE THE ACTUAL ALIGNMENT TO BE USED.

SCALE: 1" = 1000'

### PLAN AND PROFILE SHEET

DESIGN	JSW	DATE	10/04	ARIZONA DEPARTMENT OF TRANSPORTATION TRANSPORTATION PLANNING DIVISION CORRIDOR EVALUATION FOR CANAMEX DESIGNATION BETWEEN I-10 AND US93 (WICKENBURG RD/VULTURE MINE RD ALIGNMENT)	PRELIMINARY PLANNING DOCUMENTS NOT FOR CONSTRUCTION
DRAWN	JSW	DATE	10/04		
CHECKED	DDP	DATE	10/04		
ROUTE				LOCATION	
TRACS NO.				SHEET 16 OF 16 16 OF 16	

## **APPENDIX B**

### **AZ GAME AND FISH DEPARTMENT RESPONSE**



THE STATE OF ARIZONA

GAME AND FISH DEPARTMENT

2221 WEST GREENWAY ROAD, PHOENIX, AZ 85023-4390  
(602) 942-3000 • AZGFD.COM

GOVERNOR  
JANET NAPOLitano  
COMMISSIONERS  
CHAIKEN, SUSAN E. CHAIKEN, ARIZONA  
W. THOMAS GASTRAN, PHOENIX  
JOE NELSON, TULSA  
MICHAEL M. GALENTREX, FLAGSTAFF  
JIM CARTER, SAFFORD  
DIRECTOR  
DAVID L. BARNHART  
DEPUTY DIRECTOR  
STEVE K. FENWELL



April 29, 2004

Ms. Marcie Martin  
Kimley-Horn and Associates, Inc.  
7878 N. 16<sup>th</sup> St.  
Suite 300  
Phoenix, AZ 85020

Re: Special Status Species Information for T1N,R5W Sec 6; T1N,R6W Sec 1; T2N,R5W Sec 6, 7, 18, 19, 30, 31; T2N,R6W Sec 1, 12, 13, 24, 25, 36; T3N,R6W Sec 1, 12, 13, 24, 25, 36; T4N,R6W Sec 4, 9, 10, 14, 15, 23, 25, 26, 36; T5N,R5W Sec 1, 2, 11, 12, 14, 23, 27, 34; T6N,R6W Sec 12, 13, 36; T6N,R5W Sec 6, 7, 18, 19, 30, 31; T7N,R5W Sec 31; Corridor Evaluation for Chumex Designation between I-10 and US 93.

Dear Ms. Martin:

The Arizona Game and Fish Department (Department) has reviewed your request, dated April 24, 2004, regarding special status species information associated with the above-referenced project area. The Department's Heritage Data Management System (HDMS) has been accessed and current records show that the special status species listed on the attachment have been documented as occurring in the project area (3-mile buffer). In addition, this project does not occur in the vicinity of any Proposed or Designated Critical Habitat.

The Department's HDMS data are not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity.

Making available this information does not substitute for the Department's review of project proposals, and should not decrease our opportunities to review and evaluate new project proposals and sites. The Department is also concerned about other resource values, such as other wildlife, including game species, and wildlife-related recreation. The Department would appreciate the opportunity to provide an evaluation of impacts to wildlife or wildlife habitats associated with project activities occurring in the subject area, when specific details become available.



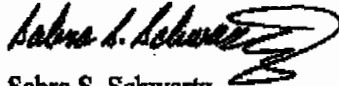
Ms. Marcie Martin

April 29, 2004

2

If you have any questions regarding the attached species list, please contact me at (602) 789-3618. General status information, state-wide and county distribution lists, and abstracts for some special status species are also available on our web site at: <http://www.azgfd.com/hdms>.

Sincerely,



Sabra S. Schwartz  
Heritage Data Management System, Coordinator

SSS:ss

Attachment

cc: Bob Broscheid, Habitat Branch Chief  
Russ Haughey, Habitat Program Manager, Region VI

AGFD #04-22-04(06)

**Special Status Species within 2 Miles of T1N,R5W Sec 6; T1N,R6W Sec 1;  
T2N,R5W Sec 6, 7, 18, 19, 30,31; T2N,R6W Sec 1, 12, 13, 24, 25, 36; T3N,R6W Sec  
1, 12, 13, 24, 25, 36; T4N,R6W Sec 4, 9, 10, 14, 15, 23, 25, 26, 36; T5N,R6W Sec 1,  
2, 11, 12, 14, 23, 27, 34; T6N,R6W Sec 12, 13, 36; T6N,R5W Sec 6, 7, 18, 19, 30, 31;  
T7N,R5W Sec 31**

Arizona Game and Fish Department, Heritage Data Management System

April 29, 2004

Scientific Name	Common Name	ESA	USFS	BLM	WSCA	NPL
<i>Gopherus agassizii</i> (Sonoran population)	Sonoran Desert Tortoise	SC			WSC	

No Critical Habitats in project area. AGFD # 04-22-04(06), Proposed Corridor Evaluation for Canamex Designated between I-10 and US 93.

**GUIDELINES FOR HANDLING SONORAN DESERT TORTOISES  
ENCOUNTERED ON DEVELOPMENT PROJECTS**  
Arizona Game and Fish Department  
Revised January 17, 1997

The Arizona Game and Fish Department (Department) has developed the following guidelines to reduce potential impacts to desert tortoises, and to promote the continued existence of tortoises throughout the state. These guidelines apply to short-term and/or small-scale projects, depending on the number of affected tortoises and specific type of project.

Desert tortoises of the Sonoran population are those occurring south and east of the Colorado River. Tortoises encountered in the open should be moved out of harm's way to adjacent appropriate habitat. If an occupied burrow is determined to be in jeopardy of destruction, the tortoise should be relocated to the nearest appropriate alternate burrow or other appropriate shelter, as determined by a qualified biologist. Tortoises should be moved less than 48 hours in advance of the habitat disturbance so they do not return to the area in the interim. Tortoises should be moved quickly, kept in an upright position at all times and placed in the shade. Separate disposable gloves should be worn for each tortoise handled to avoid potential transfer of disease between tortoises. Tortoises must not be moved if the ambient air temperature exceeds 105 degrees Fahrenheit unless an alternate burrow is available or the tortoise is in imminent danger.

A tortoise may be moved up to two miles, but no further than necessary from its original location. If a release site, or alternate burrow, is unavailable within this distance, and ambient air temperature exceeds 105 degrees Fahrenheit, the Department should be contacted to place the tortoise into a Department-regulated desert tortoise adoption program. Tortoises salvaged from projects which result in substantial permanent habitat loss (e.g. housing and highway projects), or those requiring removal during long-term (longer than one week) construction projects, will also be placed in desert tortoise adoption programs. *Managers of projects likely to affect desert tortoises should obtain a scientific collecting permit from the Department to facilitate temporary possession of tortoises.* Likewise, if large numbers of tortoises (>5) are expected to be displaced by a project, the project manager should contact the Department for guidance and/or assistance.

Please keep in mind the following points:

- These guidelines do not apply to the Mohave population of desert tortoises (north and west of the Colorado River). Mohave desert tortoises are specifically protected under the Endangered Species Act, as administered by the U.S. Fish and Wildlife Service.
- These guidelines are subject to revision at the discretion of the Department. We recommend that the Department be contacted during the planning stages of any project that may affect desert tortoises.
- Take, possession, or harassment of wild desert tortoises is prohibited by state law. Unless specifically authorized by the Department, or as noted above, project personnel should avoid disturbing any tortoise.

RAC:NLO:rc

**STATUS DEFINITIONS**  
**ARIZONA GAME AND FISH DEPARTMENT (AGFD)**  
**HERITAGE DATA MANAGEMENT SYSTEM (HDMS)**

**FEDERAL US STATUS**

**ESA** **Endangered Species Act (1973 as amended)**  
US Department of Interior, Fish and Wildlife Service (<http://arizonaes.fws.gov>)

**Listed**

- LE** Listed Endangered: imminent jeopardy of extinction.
- LT** Listed Threatened: imminent jeopardy of becoming Endangered.
- XN** Experimental Nonessential population.

**Proposed for Listing**

- PE** Proposed Endangered.
- PT** Proposed Threatened.

**Candidate (Notice of Review: 1999)**

- C** Candidate. Species for which USFWS has sufficient information on biological vulnerability and threats to support proposals to list as Endangered or Threatened under ESA. However, proposed rules have not yet been issued because such actions are precluded at present by other listing activity.
- SC** Species of Concern. The terms "Species of Concern" or "Species at Risk" should be considered as terms-of-art that describe the entire realm of taxa whose conservation status may be of concern to the US Fish and Wildlife Service, but neither term has official status (currently all former C2 species).

**Critical Habitat (check with state or regional USFWS office for location details)**

- Y** Yes: Critical Habitat has been designated.
- P** Proposed: Critical Habitat has been proposed.

[**IN** No Status: certain populations of this taxon do not have designated status (check with state or regional USFWS office for details about which populations have designated status)].

**USFS** **US Forest Service (1999 Animals, 1999 Plants; corrected 2000)**  
US Department of Agriculture, Forest Service, Region 3 (<http://www.fs.fed.us/r3/>)

- S** Sensitive: those taxa occurring on National Forests in Arizona which are considered sensitive by the Regional Forester.

**BLM** **US Bureau of Land Management (2000 Animals, 2000 Plants)**  
US Department of Interior, Bureau of Land Management, Arizona State Office  
(<http://azwww.az.blm.gov>)

- S** Sensitive: those taxa occurring on BLM Field Office Lands in Arizona which are considered sensitive by the Arizona State Office.
- P** Population: only those populations of Banded Gila monster (*Heloderma suspectum cinctum*) that occur north and west of the Colorado River, are considered sensitive by the Arizona State Office.

## Status Definitions

## STATUS DEFINITIONS

## AGRO, HEMS

## TRIBAL STATUS

### NESL Navajo Endangered Species List (2000)

Navajo Nation, Navajo and Wildlife Department

<http://www.heritageand.org/nhp/ns/navajoesl.html>

The Navajo Endangered Species List contains taxa with status from the entire Navajo Nation which includes parts of Arizona, Utah, and New Mexico. In the handbook we provide NESL status for only those taxa whose distribution includes part or all of the Arizona portion of the Navajo Nation.

### Groups

1. Those species or subspecies that no longer occur on the Navajo Nation.  
Any species or subspecies which is endangered or nearly eliminated from all or a significant portion of its range on the Navajo Nation.
2. Any species or subspecies which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range on the Navajo Nation.
3. Any species or subspecies for which the Navajo and Wildlife Department (NWD) does not currently have sufficient information to determine whether it belongs in Group 2 or Group 3 but has reason to consider them. The NWD will actively seek information on these species to determine if they warrant inclusion in a different group of removal from the list.

## MEXICAN STATUS

MEX: Mexican Federal Endangered Species List (October 16, 2000)

Proyecto Norma Oficial Mexicana PROY NOM-059-ECOL-2000

The Mexican Federal Endangered Species List contains taxa with status from the entire Mexican Republic and waters under its jurisdiction. In the handbook we provide MEX designations for only those taxa occurring in the United States in Mexico.

1. En Peligro de Extinción (Extremely Endangered in Mexico). In danger of extinction.
- A. Amenazada (Definitely Endangered in Mexico). Could become endangered if factors causing habitat deterioration or population decline continue.
- R. Riesgo de Extinción (Extinct in the Wild in Mexico). Subject to Special Protection in Mexico; utilization limited; one or more of population, geographic distribution, or recovery requires and conservation of the taxon in a special way.
- E. Extinto (Extinct in the Wild in Mexico). Probably extinct in the wild of Mexico. A native species whose only individuals will have disappeared, based on current information and studies that prove it. The only known individuals of the species are in captivity or outside the Mexican territory.

[1] = One or more subspecies of this species has status in Mexico but the HEMS does not track [1] in the subspecies level. Treat of these subspecies as endemic to Mexico. Do not count the NORMA Oficial Mexicana PROY NOM-059-ECOL-2000 for them.]

**STATE STATUS****NPL Arizona Native Plant Law (1999)**

Arizona Department of Agriculture (<http://agriculture.state.az.us/PSD/nativeplants.htm>)

- HS** Highly Safeguarded: no collection allowed.
- SR** Salvage Restricted: collection only with permit.
- ER** Export Restricted: transport out of State prohibited.
- SA** Salvage Assessed: permits required to remove live trees.
- HR** Harvest Restricted: permits required to remove plant by-products.

**WSCA Wildlife of Special Concern in Arizona (in prep)**

Arizona Game and Fish Department (<http://www.azgfd.com>)

- WSC** Wildlife of Special Concern in Arizona. Species whose occurrence in Arizona is or may be in jeopardy, or with known or perceived threats or population declines, as described by the Arizona Game and Fish Department's listing of Wildlife of Special Concern in Arizona (WSCA, in prep). Species indicated on printouts as WSC are currently the same as those in Threatened Native Wildlife in Arizona (1988).

Revised 8/14/02, AGFD HDMS

J:\HDMS\DOCUMENT\BOOKS\TEMPLATE\ORDEF\STATDEF



THE STATE OF ARIZONA  
**GAME AND FISH DEPARTMENT**

2221 WEST GREENWAY ROAD, PHOENIX, AZ 85023-4399  
(602) 942-3000 • AZGFD.COM

Yuma Office, 8140 E 28<sup>th</sup> Street, Yuma, AZ 85365-3596 (928) 342-0091

GOVERNOR  
JANET NAPOLITANO  
COMMISSIONERS  
CHAIRMAN, SUSAN E. CHILTON, ARIVACA  
W. HAYS GILSTRAP, PHOENIX  
JOE MELTON, YUMA  
MICHAEL M. GOLIGHTLY, FLAGSTAFF  
WILLIAM H. MCLEAN, GOLD CANYON  
DIRECTOR  
DUANE L. SHROUFE  
DEPUTY DIRECTOR  
STEVE K. FERRELL



August 9, 2004

David Perkins  
Kimley-Horn and Associates, Inc.  
1800 E. River Road, Suite 100  
Tucson AZ 85718

Re: Preliminary Comments on CANAMEX Corridor Evaluation, Wickenburg Road/Vulture Mine Road Alignment, Maricopa County

Dear Mr. Perkins:

The Arizona Game and Fish Department (Department) has reviewed the information on the above-referenced CANAMEX Corridor Evaluation provided at the public meeting on July 15, 2004. The following comments are provided for your consideration.

The Department understands that the Arizona Department of Transportation (ADOT) is evaluating the Wickenburg Road/Vulture Mine Road Alignment as the connecting segment between Interstate 10 and U.S. Highway 93 of the CANAMEX Corridor. We further understand that the proposal includes upgrading the Wickenburg Road/Vulture Mine Road to a limited access, four-lane highway with a median and a design speed of 70 mph.

The Department notes that the proposed upgrade increases both the speed and volume of traffic from the existing roads. The new road crosses important wildlife habitat and will be a significant barrier to wildlife movement. For these reasons, the road has the potential to have significant adverse impacts to wildlife. The Department anticipates that we will be involved in determining how to minimize impacts to wildlife from the proposed road upgrade and to mitigate for unavoidable impacts.

Thank you for the opportunity to be involved in the planning process. If you have any questions, please contact me at 928-341-4047.

Sincerely,

William C. Knowles

**David Perkins**  
**August 9, 2004**  
**2**

**Habitat Specialist**  
**Region IV, Yuma**

**cc: Russell Engel, Habitat Program Manager, Region IV**  
**Larry Voyles, Regional Supervisor, Region IV**  
**Rebecca Davidson, Proj. Eval. Prog. Supervisor, Habitat Branch**

**AGFD # 07-10-04 (A)**



## **APPENDIX C**

### **STATE HISTORIC PRESERVATION OFFICE STANDARDIZED REPORT ABSTRACT**



**Kimley-Horn  
and Associates, Inc.**

## **SHPO STANDARDIZED REPORT ABSTRACT**

**AGENCY:** Arizona Department of Transportation

**REPORT TITLE:** Literature Review for the Proposed CANAMEX Corridor Evaluation Between Interstate 10 (355<sup>TH</sup> Avenue) and US Highway 93 (Wickenburg Road–Vulture Mine Road), Maricopa County, Arizona

**DATE OF REPORT:** May 7, 2004

**AGENCY PROJECT NUMBER:** ADOT Project No. T04-49-00007, RX KG0558

**ACS PROJECT NUMBER:** 04-035-01

**PROJECT DESCRIPTION:** The Arizona Department of Transportation (ADOT) is initiating a detailed transportation planning study to evaluate the feasibility of a transportation corridor from Interstate 10 (I-10) to US 93 along Wickenburg Road–Vulture Mine Road. The study is to identify and assess a feasible alternative for the proposed CANAMEX Trade Corridor and establish a foundation for a future design concept report. At the request of Ms Marcie Martin of Kimley-Horn and Associates (KHA), Archaeological Consulting Services, Ltd. (ACS) prepared a Class I literature review of the project area to provide cultural resources evaluation criteria for the feasibility study.

**LOCATION:** Township 1 North, Range 5 West through Township 6 North, 6 West (Gila and Salt River Baseline and Meridian), Maricopa County. Plotted on the USGS 7.5' Vulture Mine, Wildcat Well, Belmont Mountain, Star Well, Flatiron Mountain, and Wintersburg, Ariz. topographic quadrangles.

**NUMBER OF SURVEYED ACRES:** n/a

**METHODOLOGY:** Sources examined for this literature review include archaeological site and project files at the AZSite Cultural Resources Database and the ADOT Historic Preservation Team's Portal. Mining information was obtained from the AzMILS geographic index published by the Arizona Department of Mines and Mineral Resources.

**NUMBER OF SITES:** n/a

**ELIGIBLE SITES:** n/a

**SITES OF UNKNOWN ELIGIBILITY:** n/a

**NOT ELIGIBLE SITES:** n/a

**COMMENTS:** ACS' literature review and culture-historical overview for the proposed CANAMEX corridor location study illustrates the potentially complex interrelationship between current Native American concerns regarding the area, and by extension, the complexity of sorting out the potential archaeological resources and TCPs that may occur within the review area boundaries. Thus, this document should be considered a preliminary study designed to evaluate the cultural sensitivity of the proposed corridor; additional research will be necessary in future stages of the project.



It should be noted that the distribution of archaeological sites in the project area reflects the location of previous archaeological work. Since the majority of surveys conducted in the review area were linear in scope (e.g., road alignments), the illustrated distribution of sites in any given location cannot be considered indicative of the actual distribution of sites across the landscape.

The research revealed that large portions of the review area have not been examined for cultural resources. Consequently, these areas will need to be systematically surveyed for cultural resources before any ground disturbance can occur. In addition, given the limitations of the AZSite data, future phases of the project will need to examine original site documentation and maps of the previously recorded sites; supplementary ground survey may be required to confirm their location and surface extent, and assess their present condition.

Future phases of this project also will need to consult other important sources of relevant information. At a minimum, a comprehensive archival records search should be completed that includes examination of written sources and historic maps from various agencies and repositories, including cultural resource inventory files at the State Historic Preservation Office and Bureau of Land Management Phoenix Field Office, and archival information at the ASLD, Arizona State Archives, the Arizona State Library, local museums and historical societies, and the Arizona Mineral and Mining Museum. Historic accounts and Sanborn Fire Insurance maps should be consulted where available to determine where historic properties might occur and the types of buildings, industrial sites, and services that were in existence during the area's historic occupation. Direct interviews with interested parties, such as members of the various Native American tribes claiming cultural affiliation with the review area, also should be conducted in future phases of the project.

The information gathered by this research should be oriented towards addressing general research questions that might be developed for this project, including prehistoric, protohistoric, and historic Native American land use and occupation; historic Anglo settlement and industry; transportation and communication; government undertakings; and cultural ecology, geography, and historic land use. The results of such an endeavor will enhance our understanding of the area's prehistory and history, and will ensure adequate documentation and protection of its cultural resources.

**LITERATURE REVIEW FOR THE PROPOSED CANAMEX CORRIDOR  
EVALUATION ALONG WICKENBURG ROAD-VULTURE MINE ROAD,  
BETWEEN INTERSTATE 10 (355<sup>TH</sup> AVENUE) AND US HIGHWAY 93,  
MARICOPA COUNTY, ARIZONA**

*ADOT Project No. T04-49-00007, RX KG0558*

Prepared by  
Lourdes Aguila and Kristin L. Fangmeier  
Archaeological Consulting Services, Ltd.  
ACS Project No. 04-035-01  
May 7, 2004

The Arizona Department of Transportation (ADOT) is initiating a detailed transportation planning study to evaluate the feasibility of a transportation corridor from Interstate 10 (I-10) to US Highway (US) 93 along Wickenburg Road-Vulture Mine Road. The study is to identify and assess a feasible alternative for the proposed CANAMEX Trade Corridor and establish a foundation for a future design concept report. At the request of Ms Marcie Martin of Kimley-Horn and Associates (KHA), Archaeological Consulting Services, Ltd. (ACS) prepared a Class I literature review of the project area to provide cultural resources evaluation criteria for the feasibility study.

This document should be considered a preliminary study designed to evaluate the cultural sensitivity of the proposed corridor. Future phases of this project will need to consult other important sources of information, including but not limited to historical documents and maps at the State Historic Preservation Office, the Arizona Department of Mines and Mineral Resources, ADOT, the Bureau of Land Management, the Arizona State Library, university and local libraries, and local museums and historical societies. Direct interviews with interested parties, such as members of the Native American tribes claiming cultural affiliation with the review area, also should be conducted in future phases of the project.

### **Review Area**

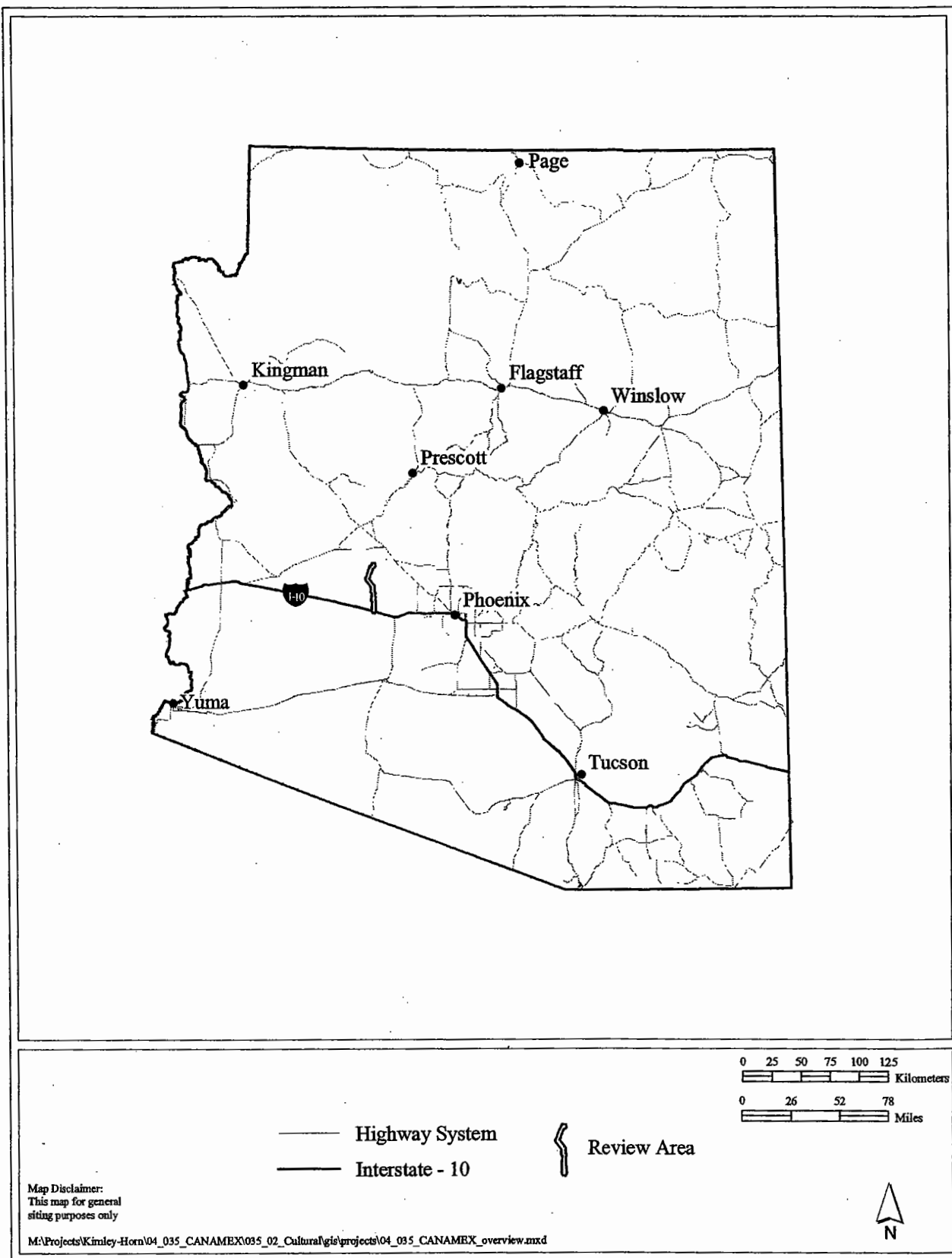
The proposed corridor would begin at the intersection of the existing I-10 alignment and 355<sup>th</sup> Avenue, extend north along the existing Wickenburg Road-Vulture Mine Road alignment, and terminate at the intersection of Vulture Mine Road and the future US 93/US 60 Wickenburg Bypass (Figure 1). This area includes portions of Township 1 North, Range 5 West to Township 6 North, Range 6 West (Table 1). The review area encompasses a 1-mi buffer around the proposed corridor.

Sources examined for this literature review include archaeological site and project files at the AZSite Cultural Resources Database and the ADOT Historic Preservation Team's Portal. Mining information was obtained from the AzMILS geographic index published by the Arizona Department of Mines and Mineral Resources.

## **Cultural Overview**

### *Prehistoric Period*

The following brief culture history provides a setting for the area's cultural resources. The Paleoindian period (10,000–7,500 B.C.) represents the earliest known occupation of North America. Paleoindian lifeways were based on small, nomadic bands that followed megafauna and gathered wild plants. Although Paleoindian sites have been documented elsewhere in Arizona (e.g., Cordell 1997; Haury 1950; Huckell 1982, 1984), none have been reported near the review area.



**Figure 1. Map of Arizona showing the location of the review area.**

Table 1. Legal Description of Review Area.

Township	Range	Section(s)
01 N	05 W	6
01 N	06 W	1
02 N	05 W	6, 7, 18, 19, 30, 31
02 N	06 W	1, 2, 12, 13, 24, 25, 36
03 N	05 W	6, 7, 18, 19, 30, 31
03 N	06 W	1, 2, 11-14, 23-26, 35, 36
04 N	05 W	19, 30, 31
04 N	06 W	3-5, 8-11, 13-16, 22-27, 35, 36
05 N	05 W	6, 7
05 N	06 W	1-3, 10-15, 21-24, 26-28, 33-35
06 N	05 W	19, 29-32
06 N	06 W	25, 35, 36

The subsequent Archaic period is marked by a shift from the earlier, generalized big-game hunting adaptations toward regional diversity and exploitation of smaller game and wild plant foods (Cordell 1997; Roth 1996). The Archaic period is subdivided into three stages: Early Archaic (7500-5000 B.C.) (Haynes 1967; Martin 1963), Middle Archaic (5000-2000/1000 B.C.) (Agenbroad 1970), and Late Archaic (2000/1000 B.C.-A.D. 300/500) (Huckell 1984). Middle and Late Archaic sites in the Tucson and Phoenix basins (e.g., Ciolek-Torrello 1995; Phillips et al. 2001) have yielded evidence of horticulture, incipient ceramics, and permanent dwellings; however, little evidence has been documented for occupation of the review area before 2000 B.C. (Stone 1987).

The Formative period is characterized by the development of ceramic technology and agricultural subsistence strategies. In Arizona, the major Formative cultures have been identified as the Anasazi, Mogollon, Patayan, and Hohokam. The review area is in an interaction zone between Patayan groups to the west and the Hohokam cultural tradition to the southeast.

The Hohokam occupied large, sedentary villages along the Salt and Gila Rivers between A.D. 150 and 1450. Large-scale irrigation agriculture, an elaborate political system, and wide-ranging trade networks were hallmarks of the Hohokam cultural tradition (Haury 1976). Irrigation agriculture was supplemented by dry farming and exploitation of wild resources in upland areas. A well-crafted material culture included red-on-buff ceramics as well as worked shell, stone, and bone. Through trade or colonization, the Hohokam influence reached far beyond the cultural core areas to reach above the Mogollon Rim, into the Papagueria, and into the western deserts. This influence also extended along the Hassayampa River, which is the major waterway in the review area (Stone and Stone 1992; Stone 1986). Little archaeological research has been conducted along the Hassayampa, but existing data indicate the presence of Colonial, Sedentary, and early Classic Hohokam occupations (Wright 1995). Gladwin and Gladwin (1930) noted a clear decline in the occurrence of Hohokam ceramic sherds west of the Hassayampa, marking the edge of the Hohokam expansion into the Patayan-dominated region to the west (Wright 1995).

Prehistoric people who lived along the Lower Colorado River and adjacent western desert areas have been included in the Patayan cultural tradition in an attempt to differentiate a

western culture that is distinct from Hohokam and Anasazi (Stone 1987). Evidence of the Prescott culture, a manifestation of the Patayan tradition, has been identified from the Verde Valley to the Big Sandy Valley (Purcell and Greenwald 1995); Prescott Gray Ware sherds have been found west of Wickenburg near Aguila (Stone 1986). Prescott cultural traits include small masonry surface structures, poorly made pottery, and the presence of Anasazi, Hohokam, and Sinagua artifacts. Both prehistoric and protohistoric cultures utilized seasonal hunting and gathering with supplemental resources provided by small-scale agriculture.

No clear cultural break can be established for the western desert groups of Yuman and Yavapai from the preceding Patayan cultural tradition. Seasonal hunting and gathering with small-scale agriculture appear to have continued from prehistoric times through historic Anglo-contact periods with little change (Dobyns and Euler 1970). Four subtribes have been defined for the Yavapai: the Tolkepaya, Yavepe, Wipukpaya, and Kewevkepaya (Mariella and Khera 1983). The Tolkepaya, or Western Yavapai, inhabited the western desert from Kirkland Valley and the Bill Williams River on the north to the Gila River between the White Tank Mountains and the Colorado River on the south. These groups exploited a wide range of wild resources and practiced limited agriculture in favorable environments (Stone 1987). However, the arrival of miners and other explorers in the mid-1800s restricted Yavapai access to traditional water sources and resource procurement areas (Wright 1995).

In the early 1860s, several exploration parties followed the Hassayampa River in search of gold. The Joseph Walker party found rich placers near present-day Prescott in 1863. The Walker Trail opened an important route from the Gila River across the Hassayampa and through the Bradshaw Mountains, encouraging exploration (Stein 1994). That same year the A.H. Peeples' expedition—which counted among its members one Henry Wickenburg, an Austrian geologist and mineralogist—found gold nuggets scattered on Rich Hill, a small mountain top north of what is now Wickenburg. Soon after, Henry Wickenburg struck out on his own and headed south. His expedition discovered a rich gold lode, which he named Vulture Mine (AZ T:1:1(ASM)) (Keane and Rogge 1992). By 1865, a thriving community was established on the banks of the nearby Hassayampa River, where the gold ore extracted from Vulture and other area mines was being crushed. The settlement—a boomtown complete with saloons, stores, and ramshackle houses—was named Wickenburg in honor of Henry's discovery. Ranches and farms developed around the town to supply beef and produce for the mining communities. Many of these ranches were turned into "dude ranches" in the 1920s, beginning an important economic activity that is still practiced in the area (Trimble 1986).

For the first several decades, supplies for Wickenburg residents, as well as the ore extracted from the area's mines, had to be carried by wagon. In 1894, under the leadership of railroad magnate Frank Murphy, the Santa Fe, Prescott & Phoenix (SFP&P) Railway reached Wickenburg by way of Prescott, thereby linking the town to the transcontinental Santa Fe Railroad at Ash Fork. A depot, section house, pump house, and water tank were built by 1895. Later that same year, the SFP&P built a road linking the depot to Castle Hot Springs, a popular local resort that often housed railway officials, bringing it to national attention. Shortly after 1900, the Santa Fe Railroad began considering a more direct route between Phoenix and California. Construction of the



Arizona & California Railway began in 1904 with the new track branching off the main line of the SFP&P Railway a little north of Wickenburg. This route was completed in 1910 (Sayre 1990). The railway was instrumental in the development of the mining industry in the Wickenburg area.

### *Native American Cultural Affiliation*

The Native American groups who claim ancestral or traditional ties to the greater review area include the Mohave, Fort Mohave, Yavapai-Prescott, Yavapai-Apache, Pima-Maricopa, and Hopi (Table 2). An extensive written and historical database exists for many of these tribes, particularly for the Hopi; fewer sources of information are available for some of the other groups. Comprehensive coverage of the Protohistoric and Historic periods for all the native cultures represented in this project is beyond the scope of this overview; however, future stages of the project should include brief ethnohistoric summaries of the various tribal groups relevant to this study, with emphasis on the types of archaeological and historic properties that might be encountered within the review area. This would serve to provide a historical context for the review area and to gain an understanding and appreciation of the Native American groups who occupy, or once occupied, this portion of western Arizona. A secondary, but equally critical component is to identify possible traditional cultural properties (TCP) or other significant landscapes that may be impacted by the proposed undertaking. Future work towards this goal also may require informant interviews, additional archival research, and consultation with these native groups.

Table 2. Native American Groups with Cultural Affiliations to the Review Area.

<b>Tribe</b>	<b>Traditional Use Area within Current Review Area</b>	<b>Current Location/Reservation</b>
Mohave	All	Colorado River Indian Reservation, north of Yuma, Arizona
Fort Mohave	Ancient trade routes along Hassayampa River	Fort Mohave Reservation, Lower Colorado River, Arizona, Nevada, and California
Yavapai- Prescott	All	Yavapai-Prescott Indian Reservation, Prescott, Arizona
Yavapai- Apache	All	Yavapai-Apache Indian Community, Camp Verde, Arizona
Pima- Maricopa	All	Salt River Pima-Maricopa Indian Community, Scottsdale, Arizona
Hopi	All of Arizona	Hopi Mesas, northeastern Arizona

### **Previous Research**

This section presents an inventory of cultural resource investigations undertaken to date within the review area (Table 3, Figures 2–10), and lists the archaeological sites and other historic properties that have been recorded as a result of these investigations (Table 4, Figures 2–10). The site and project locational data presented in Figures 2–10 were obtained from AZSite. In some cases, the archaeological site shapes provided by AZSite represent the smallest rectangular extent or “minimum bounding rectangle” that fully encloses the site area, but do not reflect actual site boundaries.

Table 3. Summary of Previous Archaeological Research In Review Area.

Location	Agency No.	Project Description	Reference(s)
T3N/R5W/§18, 19 T3N/R6W/§13, 14, 24	1972-5.ASM	Granite Reef Aqueduct	Kemrer et al. 1972
T3N/R5W/§18, 19 T3N/R6W/§13, 14, 24	1978-68.ASM	Reach 7 Granite Reef	Simonis 1978
T5N/R6W/§10-15, 22, 23, 26	1984-128.ASM	Mead-Phoenix 500kV	Keller 1986
T5N/R6W/§10-12	1986-249.ASM	Mead-Phoenix Realignment	Howard and Rogge 1986
T2N/R5W/§31 T2N/R6W/§36	1987-222.ASM	U.S. Telecom Buried Fiber Optic Cable	Rogge and Bruder 1987
T5N/R6W/§1, 2, 11, 12 T6N/R6W/§35	1999-410.ASM 11-110.BLM	Vulture Ranch Right-of-Way Survey	Hart 1999
T2N/R5W/§29, 30 T2N/R6W/§25	2000-723.ASM	AT&T NexGen/Core Project Link 3 Class 3 Survey	Kearns et al. 2001
T2N/R5W/§19, 20, 29, 30 T2N/R6W/§25	2001-406.ASM	Surveys of Six Proposed Reroutes for a Proposed Fiber Optic Cable ROW	Baker and Webb 2001
T2N/R5W/§31 T2N/R6W/§36	2002-184.ASM	Wintersburg/Phillips Tower Survey	Lundin 2002
T3N/R5W/§18, 19 T3N/R6W/§13, 14, 23, 24	78-018.ASU	Unknown	AZSite

Table 4. Summary of Previously Recorded Cultural Resources in Review Area.

Site Number	Location	Cultural Affiliation	Site Type	Eligibility	Reference(s)
AZ T:1:1(ASM)	T6N/R6W/§36	Euro-American	Vulture Mine	No data	AZSite
AZ T:5:2(ASU)	T3N/R6W/§14, 23	Native Archaeological Culture	Three rock rings	Considered Eligible	Simonis 1978
AZ T:5:3(ASU)	T3N/R6W/§24	Hohokam	Three rock rings, bedrock grinding stones	Considered Eligible	Simonis 1978
AZ T:5:4(ASU)	T3N/R5W/§18, 19	Native Archaeological Culture	Lithic concentrations and rock rings	Considered Eligible	Simonis 1978
AZ T:1:1(BLM)	T6N/R5W/§30	Euro-American	Historic mine and trash scatter	Considered Eligible	AZSite
AZ T:1:8(BLM)	T6N/R5W/§30	Native Archaeological Culture	Chipped stone scatter, possible campsite	Not evaluated	AZSite
AZ T:5:7(BLM)	T3N/R6W/§25	Native Archaeological Culture	Chipped stone scatter and possible roasting pit	Considered Eligible	Stone 1988
AZ T:5:8(BLM)	T3N/R6W/§25	Native Archaeological Culture	Three rock features	Considered Eligible	Stone 1988
AZ T:5:10(BLM)	T2N/R6W/§12	Euro-American	Historic homestead	No data	Stone 1988

## Historic Contexts

To be eligible for inclusion in the National Register of Historic Places, historic properties must be at least 50 years old and meet one or more of the criteria set forth in 36 CFR 60.4:

- Criterion A: applies to properties that are associated with events that have made a significant contribution to the broad patterns of our history; or
- Criterion B: applies to properties that are associated with the lives of persons significant in our past; or
- Criterion C: applies to properties that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- Criterion D: applies to properties that have yielded, or may be likely to yield, information important in prehistory or history.

Archival records suggest the review area was extensively used in historic times for mining, and the limited archaeological surveys confirm this observation. In fact, no fewer than four historic mining districts—the Blue Tank, San Domingo, Wickenburg, and Vulture Mining Districts—have been recognized near the review area (Keane and Rogge 1992). The mineral extraction industry continues to play a significant role in the area's economy. The Arizona Department of Mines and Mineral Resources (n.d.) AzMILS geographic index (County Mine Map CM-7:4-5) lists at least 17 mines and mining claims within the review area, most of them adjacent to the proposed alignment.

Historic roads and utility rights-of-way served to connect the mines to nearby towns, the Hassayampa River, the railroads, and other major transportation routes. Although few sites have been formally evaluated, these historic properties are likely to be eligible under multiple criteria, especially Criterion A, for their association with major area events, and Criterion D, for their information potential. If found, properties closely associated with Henry Wickenburg, Frank Murphy, Thomas Bullock, or other persons who played a significant role in the area's history would be eligible under Criterion B. Mines, roads, and structures that are characterized by particular engineering or architectural styles may be eligible under Criterion C.

Although numerous prehistoric sites are reported to be in the area, few have been documented by archaeologists. Hohokam and Yuman transportation corridors typically followed major drainages; larger prehistoric sites would be expected close to the Hassayanpa River and its tributaries, springs, or other reliable water sources. The surrounding areas would likely have temporary campsites and resource procurement loci. Most archaeological sites, if in good condition, would be eligible under Criterion D. Sites with petroglyphs or pictographs might be eligible under Criterion C.

In addition to meeting one or more criteria, properties must be significant within the context of prehistory or history. Significant historic properties must also possess integrity, which is the composite of seven qualities: location, design, setting, materials, workmanship, feeling, and association. All of these qualities do not have to be present for a historic property to be eligible for the National Register. In fact, the integrity of archaeological properties is usually based on the degree to which the remaining evidence can provide *important* information about the prehistory or history of an area.

All archaeological sites have the potential to yield information, but assessment of the information's importance is a critical factor. To utilize the criteria effectively, the National Park Service developed the concept of historic context, which consists of a time (e.g., Late Historic period), a place (e.g., the Vulture Mountains), and a theme (e.g., industry). Several historic context studies on the prehistory and history of Arizona have been developed by the National Park Service and SHPO. Those of relevance to the current project include, but are not limited to:

- Lithic Sites in Arizona (Slaughter et al. 1992)
- Prehistoric to Historic Transition Period in Arizona (Gilpin and Phillips 1998)
- Gold and Silver Mining in Arizona (Keane and Rogge 1992)
- Historic Trails in Arizona from Coronado to 1940 (Stein 1994)
- Homesteading in Arizona, 1862–1940 (Stein 1990)
- Transcontinental Railroading in Arizona, 1878–1940 (Janus Associates 1989)

In the vicinity of the project area, a wide range of historic sites, including mining camps, trash dumps, buildings, roads, and railroad features have been identified that have the potential to contribute to these contexts and themes. For example, historic mining properties may contribute to such themes as industry, commerce, economics, and engineering; individual properties may be related to a more specific theme, place, and time, such as secondary gold mining in Arizona from 1900 to 1942 (Keane and Rogge 1992). Historic road segments and railroad features can provide information regarding the development of transportation corridors in the region. Prehistoric sites also include a wide range of resources (e.g., habitations, lithic procurement loci, artifact scatters, and resource processing areas) that can potentially contribute significant information about the area's prehistoric settlement patterns, subsistence practices, and sociopolitical organization.

### ***Cultural Sensitivity Evaluation***

As the preceding sections demonstrate, a variety of historic properties have been documented in the review area. In addition, many Native American groups have a long history of use and/or settlement either within or in the vicinity of the review area. It is likely that some of the area's ancestral cultures (e.g., the Yuman) were the ancestors of the modern Mohave or Pai groups, but other groups, like the Hopi and Pima-Maricopa, also have demonstrable ties to the area's prehistoric cultural traditions. Over time, the territories recognized by the various groups have shifted under pressures of population movements, conflict among neighbors, the advent of Spanish, Mexican, and Anglo competition for land and resources, and the more recent resettlement policies of the federal government. However, many groups still maintain traditional ties to the larger area surrounding the proposed corridor. Thus, the overview area may be considered to be of high cultural sensitivity. In addition to the known archaeological sites that have been documented within the review area, any future undertaking needs to take into consideration the area's potential for containing TCPs and other significant cultural landscapes.

### ***Recommendations for Further Research***

ACS' literature review and culture-historical overview for the proposed CANAMEX corridor location study illustrates the potentially complex interrelationship between

current Native American concerns regarding the area, and by extension, the complexity of sorting out the potential archaeological resources and TCPs that may occur within the review area boundaries. Thus, this document should be considered a preliminary study designed to evaluate the cultural sensitivity of the proposed corridor; additional research will be necessary in future stages of the project.

It should be noted that the distribution of archaeological sites in the project area reflects the location of previous archaeological work. Since the majority of surveys conducted in the review area were linear in scope (e.g., road alignments), the illustrated distribution of sites in any given location cannot be considered indicative of the actual distribution of sites across the landscape.

The research revealed that large portions of the review area have not been examined for cultural resources. Consequently, these areas will need to be systematically surveyed for cultural resources before any ground disturbance can occur. In addition, given the limitations of the AZSite data, future phases of the project will need to examine original site documentation and maps of the previously recorded sites; supplementary ground survey may be required to confirm their location and surface extent, and assess their present condition.

Future phases of this project also will need to consult other important sources of relevant information. At a minimum, a comprehensive archival records search should be completed that includes examination of written sources and historic maps from various agencies and repositories, including cultural resource inventory files at the SHPO and Bureau of Land Management-Phoenix Field Office, and archival information at the ASLD, Arizona State Archives, the Arizona State Library, local museums and historical societies, and the Arizona Mineral and Mining Museum. Historic accounts and Sanborn Fire Insurance maps should be consulted where available to determine where historic properties might occur and the types of buildings, industrial sites, and services that were in existence during the area's historic occupation. Direct interviews with interested parties, such as members of the various Native American tribes claiming cultural affiliation with the review area, also should be conducted in future phases of the project.

The information gathered by this research should be oriented towards addressing general research questions that might be developed for this project, including prehistoric, protohistoric, and historic Native American land use and occupation; historic Anglo settlement and industry; transportation and communication; government undertakings; and cultural ecology, geography, and historic land use. The results of such an endeavor will enhance our understanding of the area's prehistory and history, and will ensure adequate documentation and protection of its cultural resources.



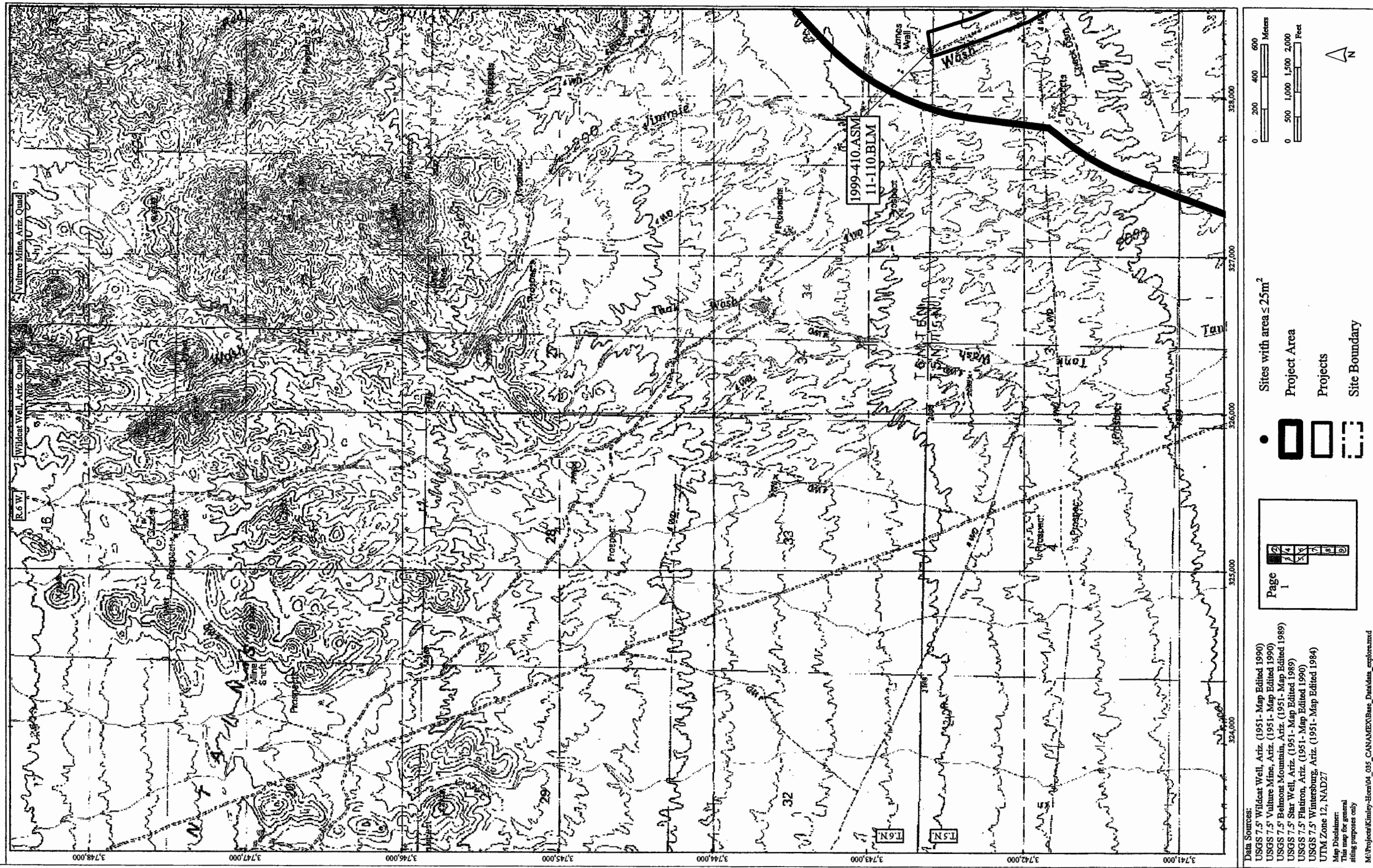


Figure 2. Portions of the USGS 7.5' Wildcat Well and Vulture Mine, Ariz., topographic quadrangles showing the location of the review area, previous archaeological projects, and cultural resources.

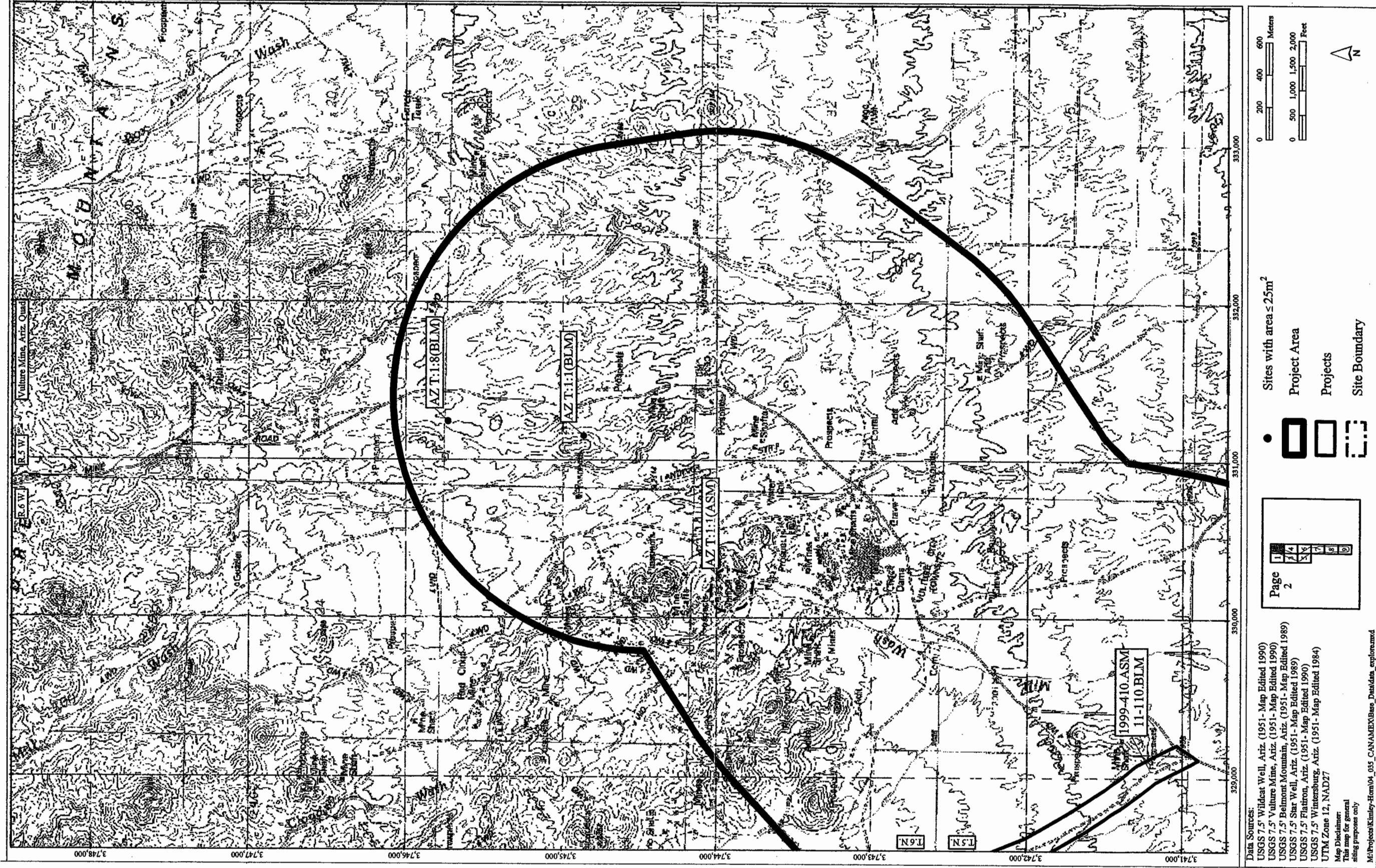
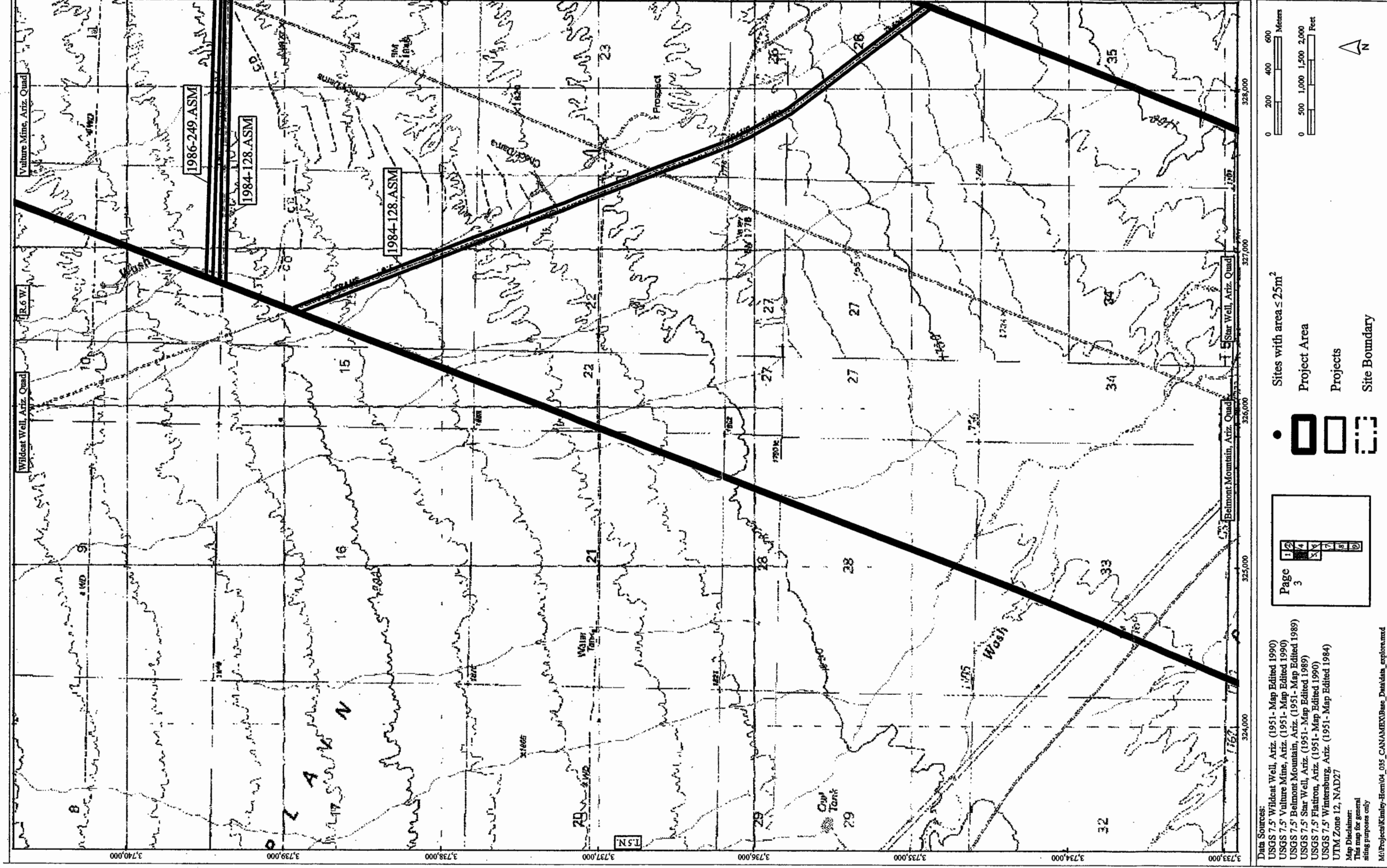


Figure 3. Portion of the USGS 7.5' Vulture Mine, Ariz., topographic quadrangle showing the location of the review area, previous archaeological projects, and cultural resources.







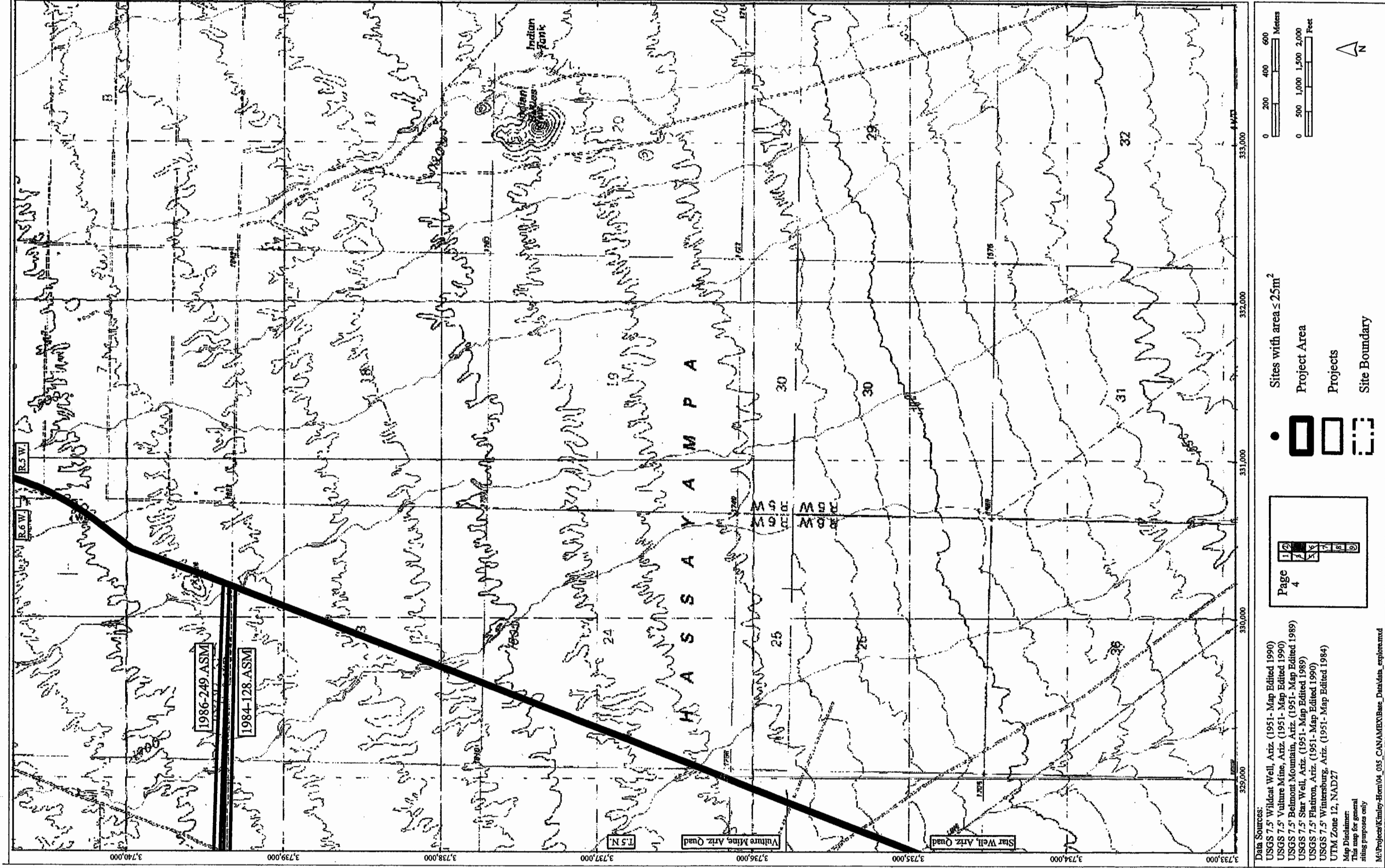
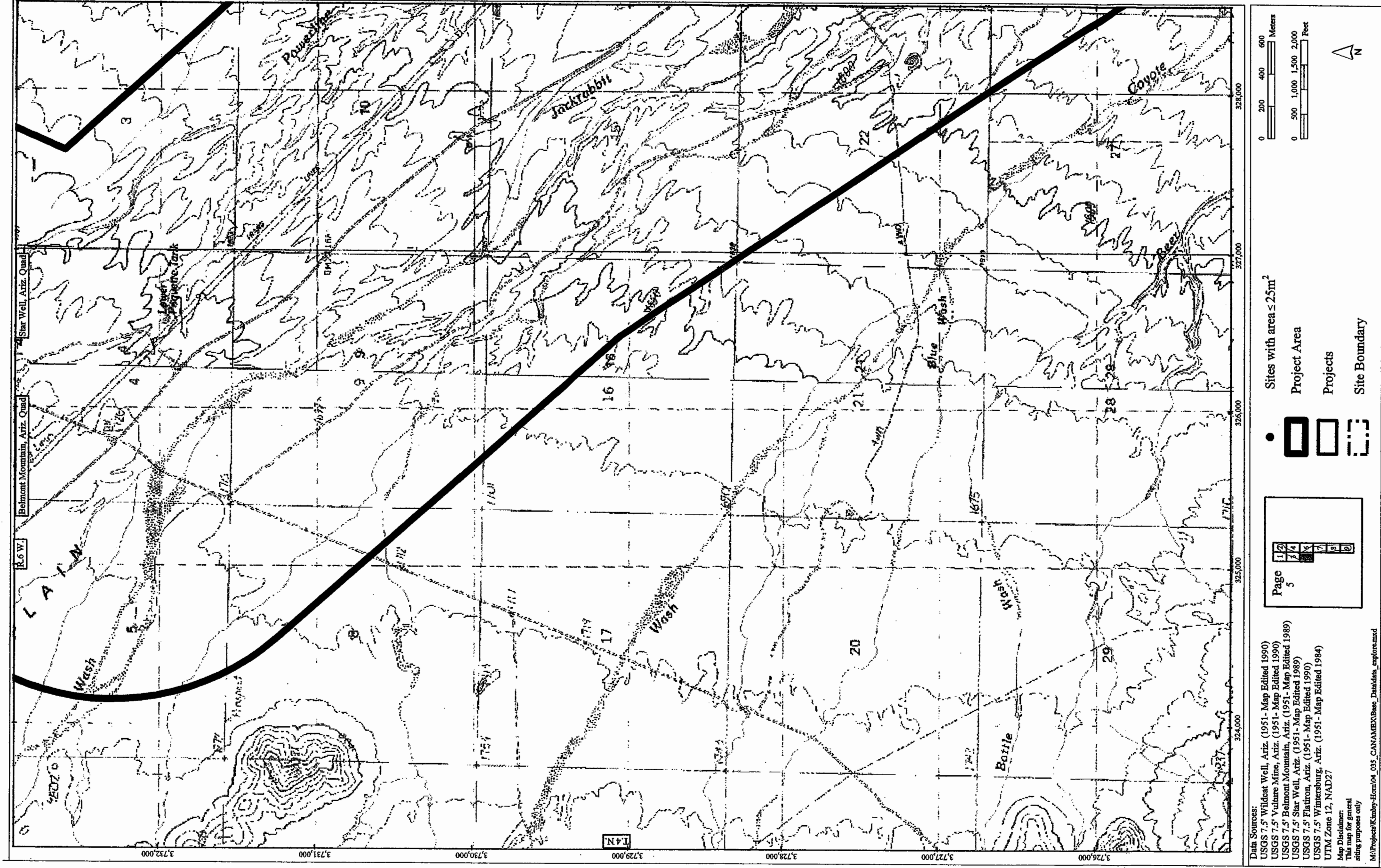


Figure 5. Portions of the USGS 7.5' Vulture Mine and Star Well, Ariz., topographic quadrangles showing the location of the review area, previous archaeological projects, and cultural resources.



**Figure 6. Portions of the USGS 7.5' Belmont Mountain and Star Well, Ariz., topographic quadrangles showing the location of the review area, previous archaeological projects, and cultural resources.**

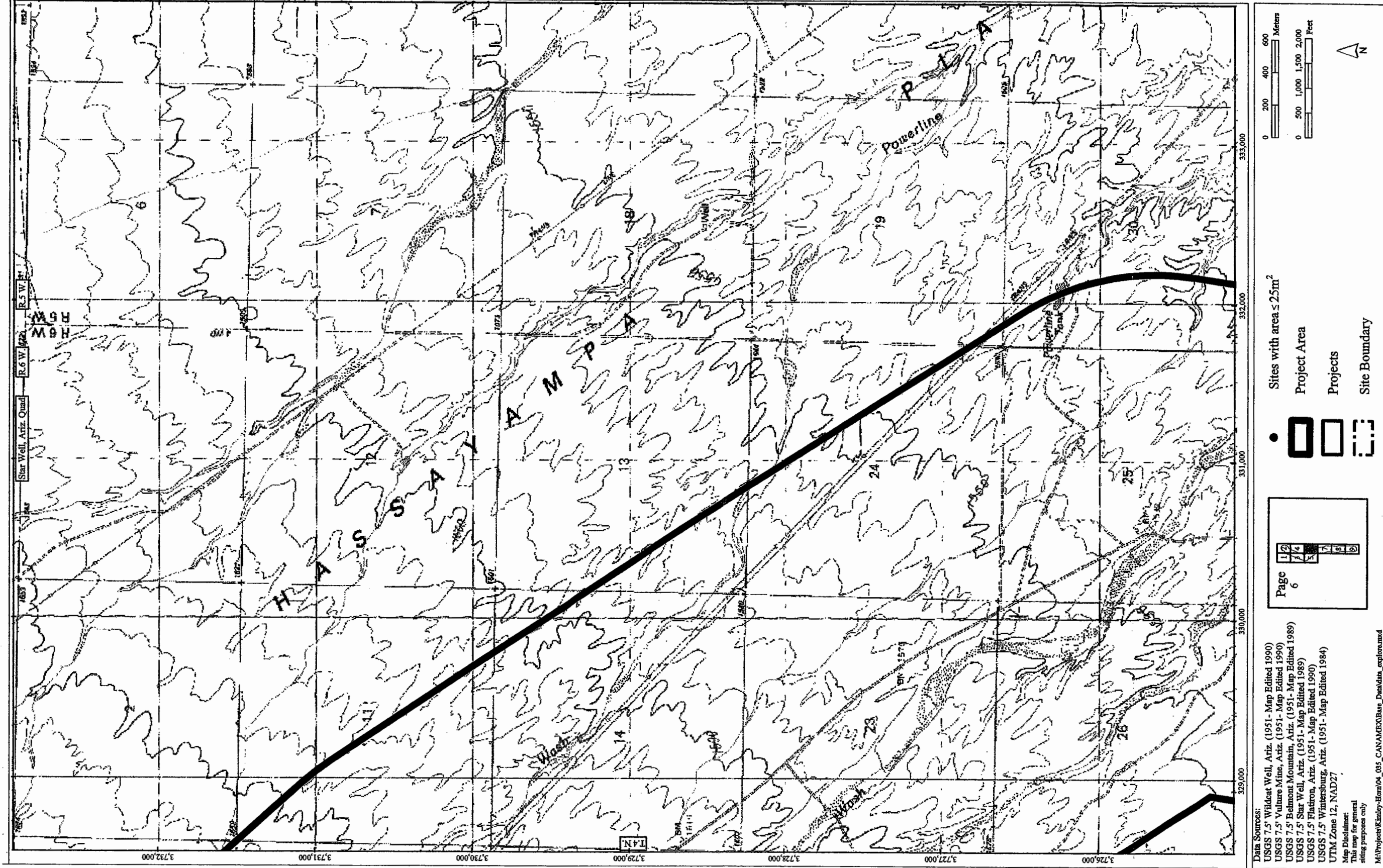
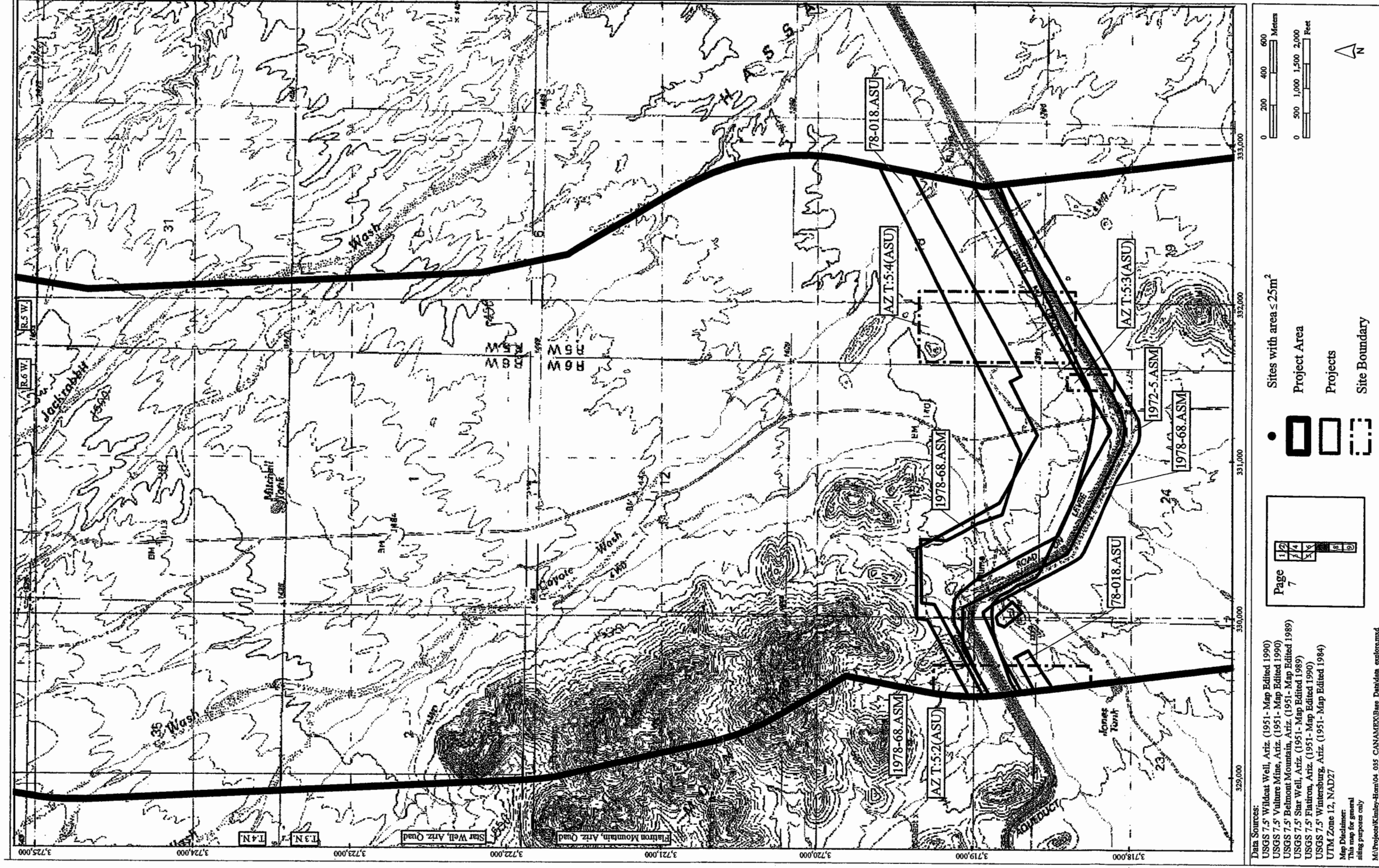


Figure 7. Portion of the USGS 7.5' Star Well, Ariz., topographic quadrangle showing the location of the review area, previous archaeological projects, and cultural resources.





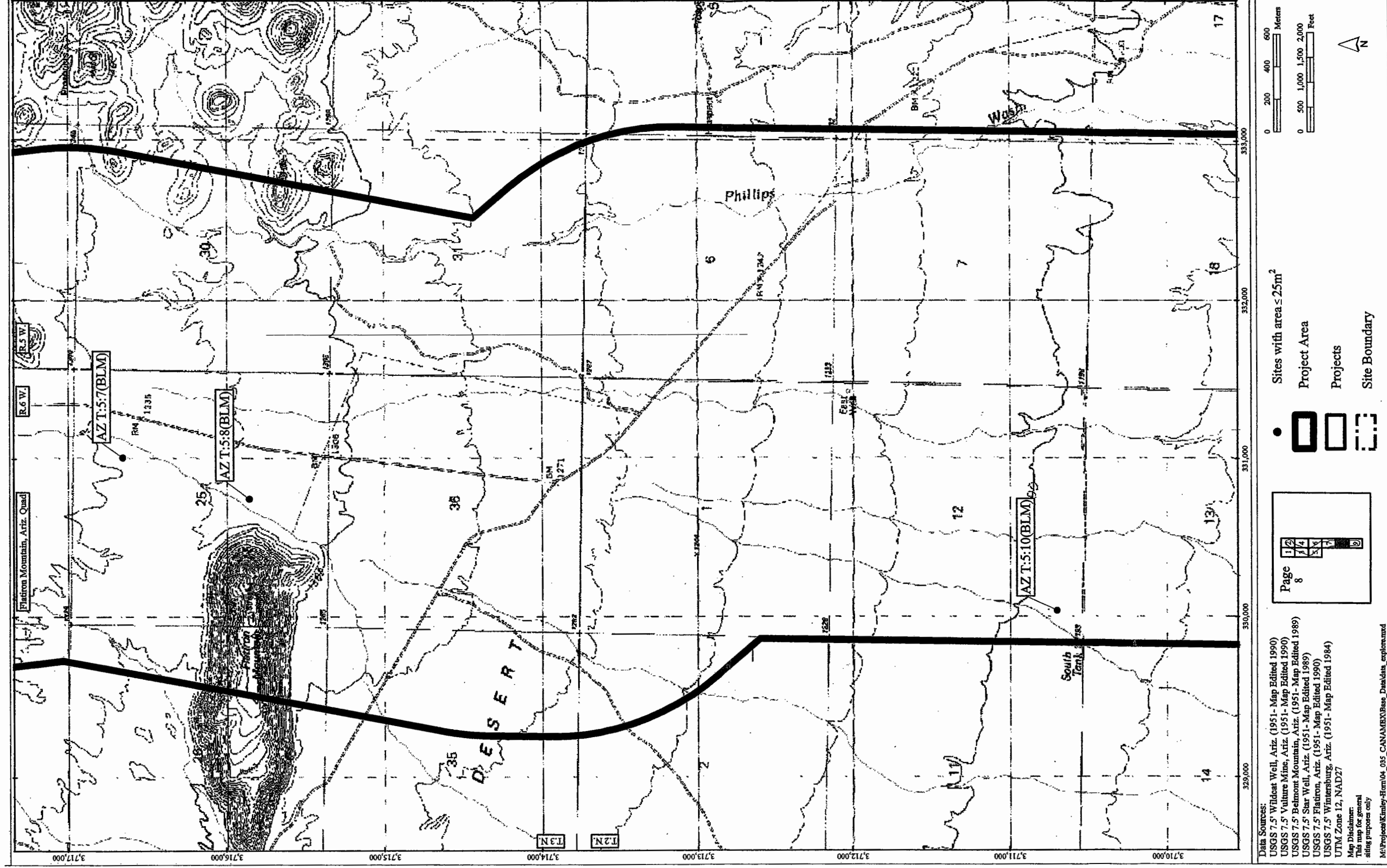


Figure 9. Portion of the USGS 7.5' Flatiron Mountain, Ariz., topographic quadrangle showing the location of the review area, previous archaeological projects, and cultural resources.

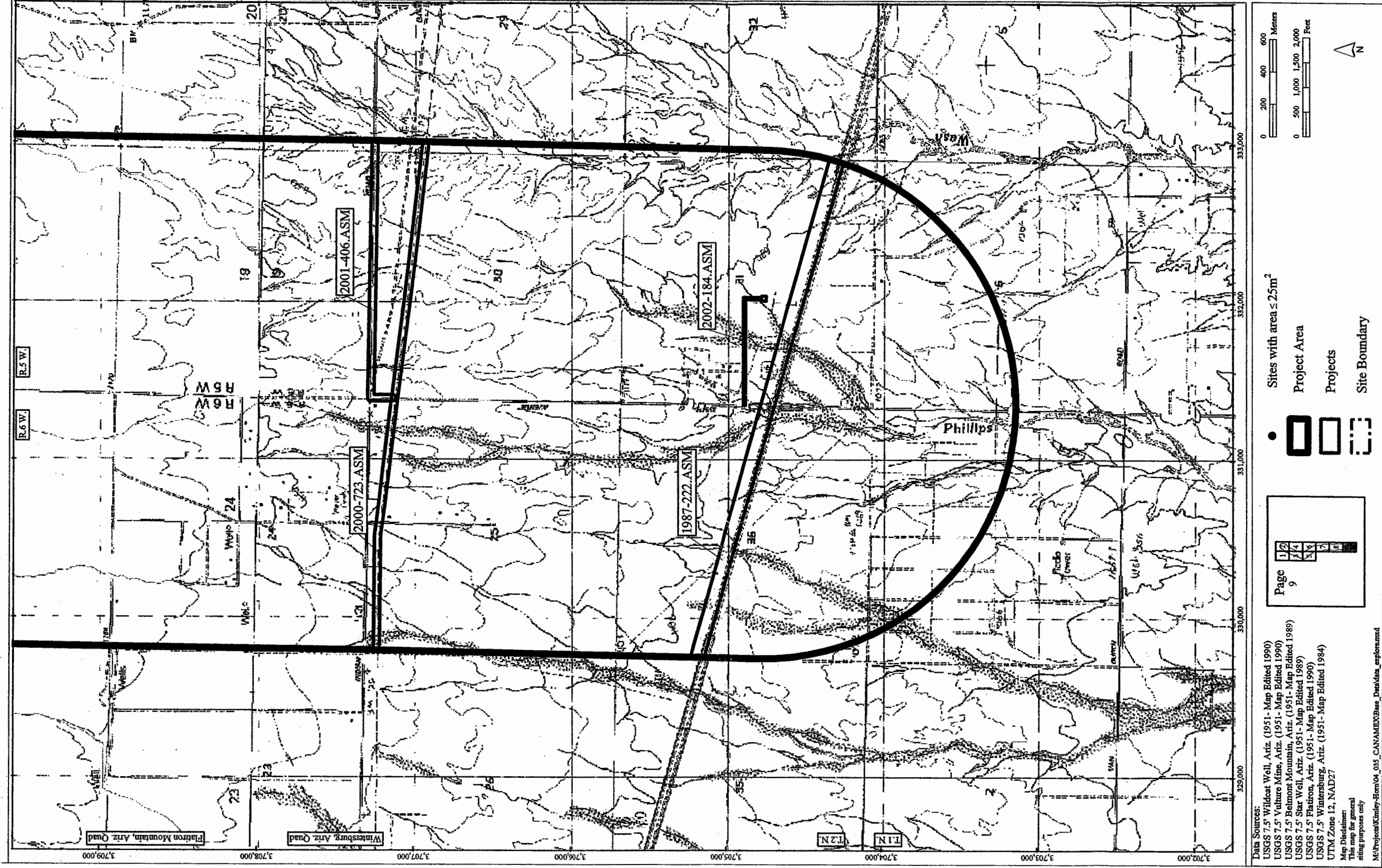


Figure 10. Portions of the USGS 7.5' Flatiron Mountain and Wintersburg, Ariz., topographic quadrangles showing the location of the review area, previous archaeological projects, and cultural resources.

## References

- Agenbroad, Larry D.  
1970 Culture Implications from the Statistical Analysis of Prehistoric Lithic Site in Arizona. Unpublished Master's thesis, Department of Anthropology, The University of Arizona, Tucson.
- Baker, Jeffrey L., and Dorothy L. Webb  
2001 *An Archaeological Survey of Six Reroutes: Addendum 2 to an Archaeological Survey of Link Three of the AT&T NexGen/Core Project, Arizona and California*. Report No. WCRM(F)212. Western Cultural Resource Management, Farmington, New Mexico.
- Ciolek-Torrello, Richard S.  
1995 The Houghton Road Site, the Agua Caliente Phase, and the Early Formative Period in the Tucson Basin. *Kiva* 60:531-574.
- Cordell, Linda S.  
1997 *Archaeology of the Southwest*. Academic Press, New York.
- Dobyns, Henry F., and Robert C. Euler  
1970 *Wauba Yuma's People: The Comparative Socio-Political Structure of the Pai Indians of Arizona*. Prescott College Studies in Anthropology 3. Prescott College Press, Prescott.
- Gilpin, Dennis A., and David A. Phillips, Jr.  
1998 *The Prehistoric to Historic Transition Period in Arizona, circa A.D. 1519-1692*. SWCA Environmental Consultants, Flagstaff. State Historic Preservation Office, Arizona State Parks, Phoenix.
- Gladwin, Winifred, and Harold S. Gladwin  
1930 *Some Southwestern Pottery Types, Series I*. Medallion Papers No. 8. Gila Pueblo, Globe, Arizona.
- Hart, David R.  
1999 *Cultural Resources Survey of an Unimproved Road Right-of-Way, Vulture Ranch, Arizona*. Technical Report #99-35. Northland Research, Tempe.
- Haury, Emil W.  
1950 *The Stratigraphy and Archaeology of Ventana Cave*. The University of Arizona Press, Tucson.  
1976 *The Hohokam: Desert Farmers & Craftsmen, Excavations at Snaketown, 1964-1965*. The University of Arizona Press, Tucson.
- Haynes, C. Vance  
1967 Carbon-14 Dates and Early Man in the New World. In *Pleistocene Extinctions: The Search for a Cause*, edited by Paul S. Martin and H. E. Wright, pp. 267-286. Yale University Press, New Haven.
- Howard, Ann Valdo, and A. E. Rogge  
1986 Archaeological Survey of a Realignment of the Mead to Phoenix 500kV Direct Current Transmission Line Preferred Alternative. Manuscript on file, Dames and Moore, Phoenix.
- Huckell, Bruce B.  
1982 *The Distribution of Fluted Points in Arizona: A Review and an Update*. Archaeological Series No. 145. Arizona State Museum, The University of Arizona, Tucson.  
1984 The Paleo-Indian and Archaic Occupation of the Tucson Basin: An Overview. *The Kiva* 49:133-145.
- Janus Associates



1989 *Transcontinental Railroad in Arizona: 1878–1940: A Context for Preserving Railroad Related Properties*. State Historic Preservation Office, Arizona State Parks, Phoenix.

Keane, Melissa, and A. E. Rogge

1992 *Gold and Silver Mining in Arizona 1848–1945: A Context for Historic Preservation Planning*. Cultural Resource Services Research Paper No. 6. Dames & Moore, Phoenix. State Historic Preservation Office, Arizona State Parks, Phoenix.

Kearns, T. M., T. J. Lennon, J. Jones, and S. F. Mehls

2001 *An Archaeological Survey of Link Three of the AT&T NexGen/Core Project, Arizona and California*. Report No. WCRM(F)179. Western Cultural Resource Management, Farmington, New Mexico.

Keller, Donald R.

1986 *Final Report for Archaeological Survey of the Mead to Phoenix 500kV Direct Current Transmission Line Preferred Alternative*. Manuscript on file, Museum of Northern Arizona, Flagstaff.

Kemrer, Sandra, Sandra Schultz, and William Dodge

1972 *An Archaeological Survey of the Granite-Reef Aqueduct*. Archaeological Series No. 12, Arizona State Museum, Tucson.

Lundin, Deil R.

2002 *An Archaeological Survey of the Proposed Wintersburg/Phillips Cell Tower and Access Road Site near Tonopah, Maricopa County, Arizona*. Cultural Resources Report No. 02-361. SWCA Environmental Consultants, Phoenix.

Mariella, Patricia S., and Sigrid Khera

1983 Yavapai. In *Southwest*, edited by Alfonso Ortiz, pp. 38–54. Handbook of North American Indians. Vol. 10. Smithsonian Institution, Washington, D.C.

Martin, Paul S.

1963 *The Last 10,000 Years: A Fossil Pollen Record of the American Southwest*. The University of Arizona Press, Tucson.

Phillips, Bruce G., Gregory E. Berg, Lourdes Aguila, and Barbara S. Macnider

2001 *Data Recovery at AZ U:5:33(ASM) within the Pima Freeway Corridor, Phoenix, Maricopa County, Arizona*. Cultural Resources Report No. 116. Archaeological Consulting Services, Tempe.

Purcell, David E., and Dawn M. Greenwald

1995 *The Mead to Phoenix 500 kV Transmission Line Project: The Results of Surface Collection at Three Archaeological Sites in Mohave and Yavapai Counties, Arizona*. SWCA Archaeological Report No. 94-58. SWCA Environmental Consultants, Flagstaff.

Rogge, A. E., and J. Simon Bruder

1987 *Cultural Resource Technical Report for the U.S. Telecom Fiber Optic Cable Project from San Timoteo, CA to Socono, TX: The Arizona Segment*. Manuscript on file, Dames and Moore, Phoenix.

Roth, Barbara J.

1996 *Regional Land Use in the Late Archaic of the Tucson Basin: A View from the Upper Bajada*. In *Early Formative Adaptations in the Southern Southwest*, edited by Barbara J. Roth, pp. 37–48. Monographs in World Archaeology No. 25. Prehistory Press, Madison.

Sayre, John W.



- 1990 *The Santa Fe, Prescott & Phoenix Railway; The Scenic Line of Arizona*. Pruett Publishing Company, Boulder, Colorado.
- Simonis, Don E.
- 1978 Cultural Resource Survey Results From Reach 7 of the Granite Reef Aqueduct, Central Arizona Project. Manuscript on file, Office of Cultural Resource Management, Department of Anthropology, Arizona State University, Tempe.
- Slaughter, Mark L., Lee Fratt, Kirk Anderson, and Richard V. N. Ahlstrom
- 1992 *Making and Using Stone Artifacts: A Context for Evaluating Lithic Sites in Arizona*. Archaeological Report No. 92-5. SWCA Environmental Consultants, Tucson. State Historic Preservation Office, Arizona State Parks, Phoenix.
- Stein, Pat H.
- 1990 *Homesteading in Arizona 1862-1940: A Component of the Arizona Historic Preservation Plan*. State Historic Preservation Office, Arizona State Parks, Phoenix.
- Stein, Pat H. (preparer)
- 1994 *Historic Trails in Arizona from Coronado to 1940: Historic Context Study*. State Historic Preservation Office, Arizona State Parks, Phoenix.
- Stone, Bradford W., and Lyle M. Stone
- 1992 Cultural Resources Survey of a 6.07 Mile Long Segment of U.S. 60 in the Vicinity of Wickenburg, Maricopa County, Arizona. Project Report No. 92:29. Manuscript on file, Archaeological Research Services, Tempe.
- Stone, Connie L.
- 1986 *Deceptive Isolation: Prehistory of the Sonoran Desert in West Central Arizona*. Cultural Resource Series No. 1. Bureau of Land Management, Arizona State Office, Phoenix.
- 1987 *People of the Desert, Canyons, and Pines, Prehistory of the Patayan Country in West Central Arizona*. Cultural Resource Series No. 5. Bureau of Land Management, Arizona State Office, Phoenix.
- 1988 Human Use of the Tonopah Desert: The White Tanks West Project. Manuscript on file, Bureau of Land Management, Phoenix Field Office.
- Trimble, Marshall
- 1986 *Roadside History of Arizona*. Mountain Press Publishing Co., Missoula, Montana.
- Wright, Thomas E.
- 1995 Archaeological Investigations at Sites AZ M:16:20 and 21(ASM): The Date Creek Project, Yavapai County, Arizona. Manuscript on file, Archaeological Research Services, Tempe.

**APPENDIX D**

**MARCH PUBLIC MEETING COMMENT SUMMARY**

## **March Public Meeting Comment Summary**

### **Introduction**

Two informational open houses were held in March 2004 as part of the ADOT study, *Corridor Evaluation for CANAMEX Designation between I-10 and US 93*. Area residents, property owners, and business representatives were notified of the open houses through a media release issued to local media outlets by ADOT. The media release encouraged attendance to help ADOT identify concerns and issues with Wickenburg Road and Vulture Mine Road that should be considered as part of the study. An open house was held in Wickenburg on March 10, 2004 from 5 p.m. to 7 p.m. at Wickenburg High School, 1090 S. Vulture Mine Road. This open house was attended by approximately 122 attendees. A second open house was held in Tonopah on March 11, 2004 from 5 p.m. to 7 p.m. at Ruth Fisher Elementary School, 38201 W. Indian School Road. This open house was attended by approximately 45 attendees. A project summary sheet and map were distributed at each open house and public information was obtained using a comment form. Completed comment forms were received at the open houses and via mail or email for a comment period which ended on April 2 2004.

### **Summary of Wickenburg High School Open House Comments**

The following comments were received from participants attending the March 10, 2004 open house at Wickenburg High School or received via mail and e-mail between March 10 and April 2, 2004.

**Are you a property owner along Wickenburg Road or Vulture Mine Road within the project limits?**

Yes     36  
No       20

**How frequently do you travel along Wickenburg Road or Vulture Mine Road within the project limits?**

Daily            40  
Weekly           7  
Seldom/Never   10

**Do you feel there is a need for transportation improvements along Wickenburg Road or Vulture Mine Road? If so, provide specific problems, locations, and suggestions:**

- No, please go west of the town. See enclosed letter.
- No, please go around.
- No
- We own Douglas Ranch, which is planned for development beginning in 2007 and will be used by thousands of homeowners in the next 5 years. The road runs for several miles through Douglas Ranch.

- Keep CANAMEX out of school and residential areas.
- Yes to I-10 to Vulture Mine Rd. and Vulture Mine Rd. to 93, only if considered with a bypass through undeveloped land west of Royale.
- Only the southern portion of Vulture Mine Rd. to a "point" north to the bypass corridor. Not through Wickenburg as your map suggests.
- As long as the bypass connection is south of Vulture Mine and goes west beyond Black Hills and Black Mt. to Route 93 would be fine with me.
- Big time against.
- I don't want the CANAMEX Corridor to come through Wickenburg from Vulture Peak north to Route 93. It would cut right through the middle of my neighborhood.
- Wickenburg Rd. would be good, Vulture Mine Rd. would be more useless then useful.
- It should not be used as a CANAMEX Corridor.
- Existing roadways – Loop 303 to US-60/SR-93 are a much better routes. Corridors are already established. Putting in another corridor is too expensive.
- I think it is a good route provided the final bypass of Wickenburg is out west. Ties into Hwy 93 north of Wickenburg near Route 89 or further north.
- A good solution to connect I-10 to the west bypass around Wickenburg to SR-93. The sooner this happens the better!
- Wickenburg Road and Vulture Mine Rd. from I-10 to about Vulture Mine itself should be a very satisfactory route. But from there the CANAMEX Corridor need to bypass Wickenburg to the west and not continue along Vulture Mine Rd. through populated areas.
- Wickenburg Road would work as part of the CANAMEX Corridor. Vulture Mine Road should not be part of the CANAMEX.
- Please don't put all that truck traffic through our lovely town, especially not on Vulture Mine Rd.
- I object to a designation of Vulture Mine Rd. as a part of the CANAMEX Corridor. I see no reason why the Wickenburg Road can't connect to the Aguila Road and connect with Hwy. 71 to Hwy. 93.
- Best idea so far, providing it turns west at Vulture Mine and does not travel through the residential or any part of Wickenburg. This truck traffic is not appropriate to be traveling thru small towns.
- I think it is a great idea. It will open future expansion of the Douglas and Whispering Ranch areas to the south of Wickenburg. It will alleviate a growing traffic problem along Hwy. 60 Corridor, and you could forget funding for a Bypass around Wickenburg.
- To bring the CANAMEX Corridor up Vulture Mine Road past the Vulture Trail Head should not even be considered. We have our rural lifestyle, it would be a crime to cut our community in half and bring the noise and pollution in our town.
- Vulture Mine Road is the only County access to our home.
- I think it would be a total disaster to use Vulture Mine Rd. as a segment of the CANAMEX Corridor. I do hope this does not happen.
- Ok as long as it ties into the ultimate bypass and never causes 18 wheelers to travel in front of the schools.
- Do not use the existing roads for a segment of the CANAMEX Corridor. Why deplete the value of adjoining properties. The government "can afford" to go west to avoid it.
- It would be best to designate the corridor to the west of Vulture Mine departing Vulture Mine Rd. south of the Vulture Mine and cross Hwy. 60 around the 101 mile marker to meet US93 North and West of the Vista Royale subdivision.
- I feel the CANAMEX Corridor should turn slightly to the west below Vulture Mine and cross Hwy. 60 at about mile marker 101 then go to Hwy. 93.

- I believe this is a very good road to be developed for use as a CANAMEX Corridor. However, the route should leave the Vulture Mine Rd. within 1 mile north of the Vulture Mine and angle northwest to intersect Hwy. 93, 1 to 2 miles West of Wickenburg.
- Wickenburg Way would not be feasible since it would cut through the center of town. It could be used if the new road connected well west of town. Note 1: Using Vulture Mine Road from I-10 to just south of the old Vulture Mine site is feasible. It would not be feasible to continue on north to US 93. This would place it next to a new school through a busy commercial intersection at Wickenburg Way and through an area of large homes. Note 2: A route starting roughly at appoint where the road goes to the west and following roughly along the route of the electrical power lines that go northwest would provide, with slight adjustment, a relatively level route through primarily state and federal land. I've been over this route many times in a jeep.
- Strongly opposed.
- CANAMEX Corridor should not come up onto Vulture Mine Road – it should head at Eagle Eye Road.
- Oppose it.
- Vulture Mine Rd. near Wickenburg should not be part of CANAMEX Corridor.
- The CANAMEX Corridor should go Wickenburg Rd. towards Aguila and link to Highway 71 north to SR-93 avoiding residential, recreational and educational properties currently in place.
- Vulture Mine Rd. can not handle a 4 lane highway. It has 2 growing schools that have a 15 MPH speed limit plus school buses and school traffic. It also has the traffic from the Cultural Center, the Market, a Center, a golf course and a guest ranch that all feed on to Vulture Mine Rd. It is busy already.
- OK for that part near I-10 but it's ludicrous to carry it past two schools near intersection of Vulture Mine Rd. and US 60.
- A tragedy.
- No need to put a 4-lane, very busy super highway right near a residential area especially with 2 schools (middle and high school traffic).
- To have the CANAMEX Corridor go on Vulture Mine Rd across US-60 to SR-93 would jeopardize the school children and cause unsolvable congestion at the intersections.
- Yes I have an opinion. I strongly oppose Wickenburg Road or Vulture Mine Road part of CANAMEX Corridor.
- Yes I have an opinion. I strongly oppose Wickenburg Rd or Vulture Mine Rd. as part of CANAMEX Corridor.
- The stretch from Los Cab to Highway 60 on Culture Mine Rd. should not be included in the CANAMEX Corridor. Large semi trucks and school buses do not mix well.
- A bad idea! Would travel though residential and school areas.

**Provide any other comments/thoughts you would like to share?**

- We are not against the CANAMEX Corridor. Just do not put it on Vulture Mine Road.
- We moved here for quiet fresh air and a country lifestyle with horses, that 4 lane would destroy that.
- The rubber in the air is harmful to my health.
- Next meeting have a microphone so we can hear the questions and answers.
- Why was this briefing held? The man said the current alignment of Vulture Mine Road will not be used, but we don't know where the bypass will be built. Best statement of the evening, "When we know something we will let you know."
- Go down the bypass route and stay out of Wickenburg property.



- Get together with the far west (ultimate) bypass planners and do it together.
- Talk to me-the variables are infinite.
- I would like to be part of any committee involved.
- The proposed project area is ridiculous up toward the bypass should be way to the west.
- The interest of the tucker's and the citizens of Wickenburg would be best served if the CANAMEX Highway was aligned with Highway #71.
- You don't have any reasonable alternative – do it.
- The Wickenburg bypass should be identified now.
- What came first? The bypass or the road from I-10 to the bypass.
- Do not use Vulture Mine Rd. through the city limits of Wickenburg.
- Find another route away from Wickenburg.
- Get with the bypass (interim) people – take the traffic allocated for the “temporary” bypass and put it towards the real (south and west of town) bypass to which CANAMEX can connect.
- Also the interim bypass should not be built.
- By the time you want to do this you will need to be much farther west not to do horrible harm. Therefore use I-10 to Eagle Eye Rd. north to Route 71.
- I would suggest that at the intersection of Wickenburg Rd. and Vulture Mine Rd. that Wickenburg Rd. continue west 300 yards to the utility power lines and at that point follow the power lines north to Hwy 60, then north to intersect at Scotts Junction (Hwy 93 and Hwy 71).
- I would not like to see traffic run into Wickenburg. If this corridor is used, it needs to branch off Vulture Mine Rd. far south of Vulture Peak, Vulture Mine and existing private land/development.
- Our middle school and high school are off of Vulture Mine Rd. This will increase the traffic that will cause more accidents and possibly deaths to the children who attend these schools.
- As soon as this road is completed truckers will be carrying who knows what kind of dangerous chemicals through one of our most dense residential areas.
- People of Wickenburg live here to get away from traffic and the noise associated with that traffic.
- Right now truckers are not suppose to go down Vulture Mine Road and we want to keep it that way.
- I'm sure there are other ugly deserted desert areas this road can be taken through. Consider those possibilities.
- Please do not select the Vulture Mine route for the CANAMEX Corridor as it would destroy Wickenburg. Please choose a route to the West of Wickenburg as we feel it would be cheaper and cause less problems.
- We are opposed.
- Your advertisement says the route would go from Route 10 north to Route 93 approximately 40 miles. The southern part would cut through a lovely, scenic, pristine desert and the portion to the North would go through expensive residential properties.
- This proposed route would certainly destroy and degrade the homes in Wickenburg including where we live.
- The proposed roadway is a four lane highway and would create a polluted truck corridor as every trucker would soon know it as a shortcut with only one traffic signal to stop for in forty miles. It would become a freeway.
- We moved from the Los Angeles area to Wickenburg because of its clean and fresh air. “name withheld” has allergy and respiratory health problems. The black dust created by the rubber tires and the carbon monoxide will greatly impact her health condition.
- NW corner of Wickenburg and Camelback Access Concerns.
- Extend Wickenburg Road to the west and then north to Hwy. 93. Bypass the hills to the west of Wickenburg.
- Please do not come through our city!!

- I live on Hwy. 60 (23 yrs) and it is not suitable for truck traffic either. I travel it daily and it is more congested each year. Trucks travel too fast to be on this roadway with tourists.
- It is the shortest route possible away from already inhabited areas. (see my addition to map) Connecting it to Hwy. 85 would give access to Interstate 8 and receive some of the traffic through Phoenix.
- Your speaker was really off track. The Wickenburg bypass he kept talking about was not even on the map handed out before the meeting identifying the project area. If you have another meeting evaluating the bypass route we would be in favor of reviewing it.
- I think it would present a great hardship on our community to use Vulture Mine Rd. as a segment of the CANAMEX Corridor, affecting our schools, shopping center as well as the residential areas. This must be stopped.
- When the Hoover Dam bridge is completed we will see huge problems of truck traffic in and on the interim and/or Vulture Mine Rd. at 89/93 to the traffic light and then to the schools.
- I have owned a real estate brokerage business in Wickenburg for 28 years. I made 90% of the appraisals for the land owners, when US Hwy. 66 converted to Interstate 40.
- CANAMEX Corridor was designated by the Federal Government and I feel BLM land should be used, please work with ADOT to get this done ASAP. There is a strong consensus in the Town to support this.
- The way it is drawn on your map is stupid; it goes right past the High School and the Middle School. If it goes a little to the west it would be a lot better.
- There is our High School (almost 600 students) Middle School (almost 300 students) and heavy retail traffic on the Vulture Mine Rd. a major safety issue.
- There are 2 schools, a post office and super market along the designated area. Making this a part of the CANAMEX Corridor is completely unacceptable.
- We are in favor. As long as the highway would leave Wickenburg Rd. and swing west to connect with 74 the near Aguila as indicated during the presentation and as roughly sketched in by me on the attached.
- CANAMEX should be split off of Vulture Mine south of Wickenburg so it won't go by schools and shopping center.
- The route proposed above plus the currently planned Wickenburg Town bypass on 93 would alleviate the need for a larger Wickenburg bypass in the future.
- Plans should leave Vulture Mine Rd. at near Vulture Mine and strike north crossing Route 60, 2 to 5 miles west of Vulture Mine present crossing of at Highway 60 to link up with at SR-93.
- Go west of the projected area and connect with SR-93 northwest of Wickenburg easier construction and no people.
- South Vulture Mine Rd. has 2 schools on it- a major hazard.
- Divide a large shopping area in two at Route 60 and Vulture Mine Rd.
- Access to hundreds of homes along Vulture Mine Rd.
- Route 60 would be affected negatively.
- Quality of air.
- 2 major attractions to Wickenburg economy would be affected i.e. Flyers E ???and Rancho de los Caballeros.
- Putting a highway west of Wickenburg and the airport would seem a reasonable and less invasive solution.
- If CANAMEX must go thru the Wickenburg area it should be farther west and come out near junction 93/71.
- Improvements are needed. The concern is for the safety of students entering and exiting Vulture Mine Rd. Truck traffic needs to be diverted further west.
- CANAMEX should route west of Wickenburg near Hwy. 71 to 93.

## **SUMMARY OF RUTH FISHER ELEMENTARY SCHOOL OPEN HOUSE COMMENTS:**

The following comments were received from participants attending the March 11, 2004 open house at Ruth Fisher Elementary or received via mail and e-mail between March 11 and April 2, 2004.

**Are you a property owner along Wickenburg Road or Vulture Mine Road within the project limits?**

**Yes**      6

**No**        9

**How frequently do you travel along Wickenburg Road or Vulture Mine Road within the project limits?**

**Daily**            2

**Weekly**          8

**Seldom/Never** 5

**Do you feel there is a need for transportation improvements along Wickenburg Road or Vulture Mine Road? If so, provide specific problems, locations, and suggestions:**

- Four lane highway as perceived is a great improvement. Wickenburg bypass seems like a good idea.
- Yes, we need at least the divided highway, 2 lanes on each side for safety.
- It should have access every mile at least; except for areas designated as preserves.
- No
- No
- No, Emphatically No! Who would pay for this highway?
- No
- No
- Yes, switchbacks toward Wickenburg are not practical considering it is our emergency route if Palo Verde Nuclear malfunctioned.
- No
- 355<sup>th</sup> Avenue and Indian School Road probably needs a grade separation. Lots of traffic there now. Evenings there is a line waiting to cross.
- I think Wickenburg Rd. and Vulture Mine Rd. is the wrong route to go.
- Maybe just some minor up keep but overall it is a nice beautiful drive.
- No
- No
- Yes, transportation improvements in this area and an interchange at I-10 and 355<sup>th</sup> Avenue because of too many accidents on I-10 now! If nothing, this means there will be more in the future!

**Do you have an opinion regarding the designation of Wickenburg Road or Vulture Mine Road as a segment of the CANAMEX Corridor? If so, what is your opinion?**

- It's a great thing; it will be an economic driver.

- It is by far the best route available. There really is no alternative.
- Not wanted. Tonopah is always subjected to all this progress. I just cannot see it that way.
- It should be closer to town. Phoenix would be best.
- It would be of no economic use to the community and would totally desecrate the environment.
- I do not want it there.
- Leave it in the Phoenix area.
- No
- Please leave it alone.
- I feel that it will have a major negative impact on the desert and the wildlife in the area.
- Yes – I am opposed to the CANAMEX Highway going in front of my home and property. This highway right-of-way will effectively destroy my property and will be within 100 feet of my house.
- Should not go by the high school for safety reasons. Many school children walk or drive in the area.
- Absolutely, I designate Wickenburg road and Vulture Mine Rd. as a segment of CANAMEX Corridor!

**Provide any other comments/thoughts you would like to share?**

- The whole west side will benefit from this highway project and the effects in the future.
- Most of us believed it had been designated April 2001.
- I feel farther west. Either Eagle Eye Road or better yet route it on over to the AZ/CA border and use State Highway 95.
- Please do not ruin one of the prettiest parts of our desert. Use something farther west such as Eagle Eye Rd. Truck drivers will use it no matter where it is at.
- The cost would far exceed the benefit.
- Leave what's left of our desert alone.
- The Vulture Mountain area would be destroyed.
- We need a CANAMEX, but why not put it through Phoenix, like Las Vegas, Salt Lake City etc. Leave the desert alone.
- Consider the Tonopah to the Bellmont Mine Road and then north to SR-93 west of Congress. Less disruptive to the populous.
- I think Sun Valley Parkway is a better choice because it's already there with growth on the way.
- Sun Valley Parkway will be a much better alternative as there are no houses out there. Keep the property owners informed and give more notice for your public and private meetings. (One day isn't enough.)
- This project should be speeded up and action taken stat! Get ready for the "Reliever Route" now! We need it now! (Please inform me of your next meeting!)



## **APPENDIX E**

### **JULY PUBLIC MEETING COMMENT SUMMARY**

## **July Public Meeting Comment Summary**

### **Introduction**

Two informational open houses were held in July 2004 as part of the ADOT study, *Corridor Evaluation for CANAMEX Designation between I-10 and US 93*. Area residents, property owners, and business representatives were notified of the open houses through a media release issued to local media outlets by ADOT. The media release encouraged attendance to help ADOT identify concerns and issues with Wickenburg Road and Vulture Mine Road that should be considered as part of the study. An open house was held in Wickenburg on July 14, 2004 from 5 p.m. to 7 p.m. at Wickenburg High School, 1090 S. Vulture Mine Road. This open house was attended by approximately 32 attendees. A second open house was held in Tonopah on July 15, 2004 from 5 p.m. to 7 p.m. at Ruth Fisher Elementary School, 38201 W. Indian School Road. This open house was attended by approximately 25 attendees. A project summary sheet and map were distributed at each open house and public information was obtained using a comment form. Completed comment forms were received at the open houses and via mail or email for a comment period which ended on August 14, 2004.

### **Summary of Wickenburg High School Open House Comments**

The following comments were received from participants attending the July 14, 2004 open house at Wickenburg High School or received via mail and e-mail between July 14 and August 14, 2004.

**Are you a property owner along Wickenburg Road or Vulture Mine Road within the project limits?**

Yes     0  
No       6

**How frequently do you travel along Wickenburg Road or Vulture Mine Road within the project limits?**

Daily             0  
Weekly            3  
Seldom/Never    3

**Do you have an opinion regarding upgrading Wickenburg Road and Vulture Mine Road (to the future bypass) to a 4-lane divided roadway? If so, what is your opinion?**

- How much effort had been made to identify the user of this facility?
- Do these users want to bypass Phoenix?
- Is there a target user for this project?
- Do it fast.
- Do it as soon as possible.
- It needs to be improved, widened.
- Will make it easier to go from Wickenburg to Los Angeles.

- Should be built.
- Comment limited to comment corridor study.
- A vision of growth (statistics) shows we must have transportation routes. "They" are not developed on the "west side".

**Do you have an opinion regarding the designation of the alignment as a segment of the CANAMEX Corridor? If so, what is your opinion?**

- Who will use this route?
- If I was a trucker or tourist coming up from Mexico, would I pass up Phoenix as a source of doing commerce, fueling my vehicle, getting a bit to eat, or lodging?
- Yes.
- Yes, go ahead.
- This should be the CANAMEX Corridor.
- Probably inevitable.
- I-10 is not wide enough – even now and with the growth impact and corridor it will need vision planning and action of which we've not seen.

**Provide any other comments/thoughts you would like to share?**

- Push 70, hurry our far west bypass.
- The governor says that this is a high priority, 30 years does not seem to reflect that statement.
- The "future bypass alignment" should be substantially west of Wickenburg and be built sooner than the 'interim bypass).

## **SUMMARY OF RUTH FISHER ELEMENTARY SCHOOL OPEN HOUSE COMMENTS:**

The following comments were received from participants attending the July 15 open house at Ruth Fisher Elementary or received via mail and e-mail between July 15, 2004 and August 14, 2004.

**Are you a property owner along Wickenburg Road or Vulture Mine Road within the project limits?**

Yes 4  
No 7

**How frequently do you travel along Wickenburg Road or Vulture Mine Road within the project limits?**

Daily 1  
Weekly 8  
Seldom/Never 2

**Do you have an opinion regarding upgrading Wickenburg Road and Vulture Mine Road (to the future bypass) to a 4-lane divided roadway? If so, what is your opinion?**

- Do it.
- Compensate property owners +/- 2 miles (2 miles east and west, graduated compensation).
- This would be the best route for trucks and cars and buses to follow economically and large enough to handle the traffic.
- Do not want bypass near my home. Traffic, noise environment.
- Bypass is a politically created nuisance.
- Yes, why put a four lane road through a mountain range that has been part of Arizona's history.
- Yes, I am a Native Arizonan and my grandfather homesteaded here in the 1920's. My family has always enjoyed the beauty of the Vulture Mountains and uses them as a recreational area. So do many others.
- Terrible idea!
- Eagle Eye Road would serve the purpose. The roadway is historic between Vulture Mine and Wickenburg with deadman's curve there.
- Would prefer to keep the area from Indian School Road to Wickenburg untouched by any more development.
- I don't like it.
- This is one of our last good recreational areas.
- People camp, hike, jeep, etc. and this will ruin the peace of the area.
- I not only travel the area, I live near-by and I hate to see one of our few remaining scenic and quiet roads turned into a trash laden, polluted thoroughfare.

**Do you have an opinion regarding the designation of the alignment as a segment of the CANAMEX Corridor? If so, what is your opinion?**

- Do it soon if you are going to do it.



- Will overload I-10 between 85 and 355th Avenue.
- Being a home owner on 355<sup>th</sup> Ave., I think 339<sup>th</sup> should be looked at as an alternative its already connected to the I-10, and not a lot of development is occurring looping into 339 exit 103. Should be an option.
- The CANAMEX Corridor may not be toll-free for trucks and buses!
- Four lanes could handle the traffic easily and nice view.
- Use Salome Hwy – very little development there.
- How about 355<sup>th</sup> to Aguila Road to 60 to 71 to 93. It's all basically flat land no mountains.
- The Vulture Mountains are part of an historic Mining district.
- A road through the heart of this small mountain range would totally deface them and be an expensive proposition! Eagle Eye road is already in a flat area.
- As I stated above Eagle Eye Road would be the better designated and trucks are using the road too.
- Save my lovely desert from anymore so called progress.
- Move it farther west to Eagle Eye Road there are already many trucks using this road.
- Use existing highways, even if they are a little out of the way.
- We won't have to wreck a beautiful little road in the desert.

**Provide any other comments/thoughts you would like to share?**

- This is a corridor that is developing and will be a lot more expensive the longer we wait.
- I-10 from 355<sup>th</sup> Ave. to Phoenix needs to be a minimum of 3 lanes each way. Should have been fixed years ago. 3 lanes 355<sup>th</sup> to 85, 4 lanes to 101, minimum, for now.
- Why spend money opening another exit on the I-10 where there are exits that could be used.
- We are in corner of I-10 and 355<sup>th</sup> Avenue and will work with ADOT to put in the Diamond shaped Inter-Change for traffic in this area!
- I have very little hope that my opinion will make a difference because too much money already invested in this idea.
- If this road is built it will bring people through there who do not care and will trash our beautiful desert.
- I have watched it happen since I-10 opened through Tonopah many years ago.
- Why is it when a new highway is built the only people who receive any benefits are the ones using the highway?
- What about the residents who were already there?
- What's in it for them?